UNIVERSAL REGISTRATION DOCUMENT AND ANNUAL FINANCIAL REPORT 2019

BNP PARIBAS

The bank
for a changing
world

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BNP PARIBAS

2019 Universal registration document and annual financial report

AUTORITÉ DES MARCHÉS FINANCIERS AMF

Only the French version of the Universal Registration Document has been submitted to the AMF. It is therefore the only version that is binding in law.

The Universal Registration Document has been filed on March 3, 2020 with the AMF, as competent authority under Regulation (EU) 2017/1129 without prior approval pursuant to Article 9 of Regulation (EU) 2017/1129.

The Universal Registration Document may be used for the purposes of an offer to the public of securities or admission of securities to trading on a regulated market if approved by the AMF together with any amendments, if applicable, and a securities note and summary approved in accordance with Regulation (EU) 2017/1129.

The English language version of this report is a free translation from the original, which was prepared in French. All possible care has been taken, to ensure that the translation is an accurate presentation of the original. However, in all matters of interpretation, views or opinion expressed in the original language version of the document in French take precedence over the translation.

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1.1 Group presentation

BNP Paribas, Europe's leading provider of banking and financial services, has four domestic Retail Banking markets in Europe, namely in France, Belgium, Italy and Luxembourg.

It operates in 71 countries and has nearly 199,000 employees, including over 151,000 in Europe. BNP Paribas holds key positions in its two main businesses:

- Retail Banking and Services, which includes:
  - Domestic Markets, comprising:
    - French Retail Banking (FRB),
    - BNL banca commerciale (BNL bc), Italian retail banking,
    - Belgian Retail Banking (BRB),
    - Other Domestic Markets activities including Arval, BNP Paribas Leasing Solutions, Personal Investors, Nickel and Luxembourg Retail Banking (LRB);
  - International Financial Services, comprising:
    - Europe-Mediterranean,
    - BancWest,
    - Personal Finance,
    - Insurance,
    - Wealth and Asset Management;
- Corporate and Institutional Banking (CIB):
  - Corporate Banking,
  - Global Markets,
  - Securities Services.

BNP Paribas SA is the parent company of the BNP Paribas Group.

1.2 Key figures

RESULTS

	2015	2016	2017	2018	2019
Revenues *(in millions of euros)*	42,938	43,411	43,161	42,516	44,597
Gross operating income *(in millions of euros)*	13,684	14,033	13,217	11,933	13,260
Net income Group share *(in millions of euros)*	6,694	7,702	7,759	7,526	8,173
Earnings per share *(in euros)*(*)	5.14	6.00	6.05	5.73	6.21
Return on equity(**)	8.3%	9.3%	8.9%	8.2%	8.5%

(*) Based on net income Group share adjusted for interest on Undated Super Subordinated Notes deemed equivalent to preferred shares issued by BNP Paribas SA and treated as a dividend for accounting purposes.

(**) Return on equity is calculated by dividing net income attributable to equity holders (adjusted for interest on Undated Super Subordinated Notes issued by BNP Paribas SA, treated as a dividend for accounting purposes and adjusted for the foreign exchange effect on redeemed Undated Super Subordinated Notes) by average permanent shareholders' equity, not revaluated, between the beginning of the year and the end of the year (shareholders' equity attributable to equity holders adjusted for changes in assets and liabilities recognised directly in equity, Undated Super Subordinated Notes, remuneration net of tax payable to holders of Undated Super Subordinated Notes and proposed distribution of dividends).

MARKET CAPITALISATION

	31/12/2014	31/12/2015	31/12/2016	31/12/2017	31/12/2018	31/12/2019
Market capitalisation *(in billions of euros)*	61.4	65.1	75.5	77.7	49.3	66.0

Source: Bloomberg.

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LONG-TERM AND SHORT-TERM RATINGS

	Long-term and short-term ratings as at 5 March 2019	Long-term and short-term ratings as at 3 March 2020	Outlook	Date of last review
Standard & Poor's	A/A-1	A+/A-1	Stable	5 April 2019
Fitch	A+/F1	AA-/F1+	Stable	6 June 2019
Moody's	Aa3/Prime-1	Aa3/Prime-1	Stable	9 December 2019
DBRS	AA (low)/R-1 (middle)	AA (low)/R-1 (middle)	Stable	12 July 2019

On 5 April 2019, following its review, Standard & Poor's upgraded the long-term rating of BNP Paribas from A to A+, with a stable outlook.

On 6 June 2019, following its review, Fitch upgraded the long-term rating of BNP Paribas from A+ to AA-, and the short-term rating of BNP Paribas from F1 to F1+, with a stable outlook.

On 9 December 2019, Moody's confirmed the long-term rating of BNP Paribas at Aa3 with a stable outlook.

On 12 July 2019, DBRS confirmed the long-term rating of BNP Paribas at AA (low) with a stable outlook.

1.3 History

1966: Creation of BNP

The merger of BNCI and CNEP to form BNP represented the largest restructuring operation in the French banking sector since the end of the Second World War.

1968: Creation of Compagnie Financière de Paris et des Pays-Bas

1982: Nationalisation of BNP and Compagnie Financière de Paris et des Pays-Bas at the time of the nationalisation of all French banks

In the 1980s, deregulation of the banking sector and the growing tendency of borrowers to raise funds directly on the financial market transformed the banking business in France and worldwide.

1987: Privatisation of Compagnie Financière de Paribas

With 3.8 million individual shareholders, Compagnie Financière de Paribas had more shareholders than any other company in the world. Compagnie Financière de Paribas owned 48% of the capital of Compagnie Bancaire.

1993: Privatisation of BNP

BNP's return to the private sector represented a new start. The 1990s were marked by a change in the level of profitability of the Bank, which had the highest return on equity of any major French institution in 1998. This period was marked by the launch of new banking products and services, the development of activities on the financial markets, expansion in France and at the international level, and preparation for the advent of the euro.

1998: Creation of Paribas

On 12 May 1998, the merger between Compagnie Financière de Paribas, Banque Paribas and Compagnie Bancaire was approved.

1999: A momentous year for the Group

Following an unprecedented double tender offer and a stock market battle waged over six months, BNP was in a position to carry out a merger of equals with Paribas. For both groups, this was the most important event since their privatisation. It gave rise to a new Group with tremendous prospects. At a time of economic globalisation, the merger created a leading player in the European banking sector.

2000: Creation of BNP Paribas

BNP and Paribas merged on 23 May 2000.

The new Group derived its strength from the two major financial and banking lines from which it descends. It has two goals: to create value for shareholders, clients and employees by building the bank of the future, and to become a leading global player.

2006: Acquisition of BNL in Italy

BNP Paribas acquired BNL, Italy's 6th-largest bank. This acquisition transformed BNP Paribas, providing it with access to a second domestic market in Europe. In both Italy and France, all of the Group's businesses can now develop their activities by leveraging a nationwide banking network.

2009: Merger with the Fortis group

BNP Paribas took control of Fortis Bank and BGL (Banque Générale du Luxembourg).

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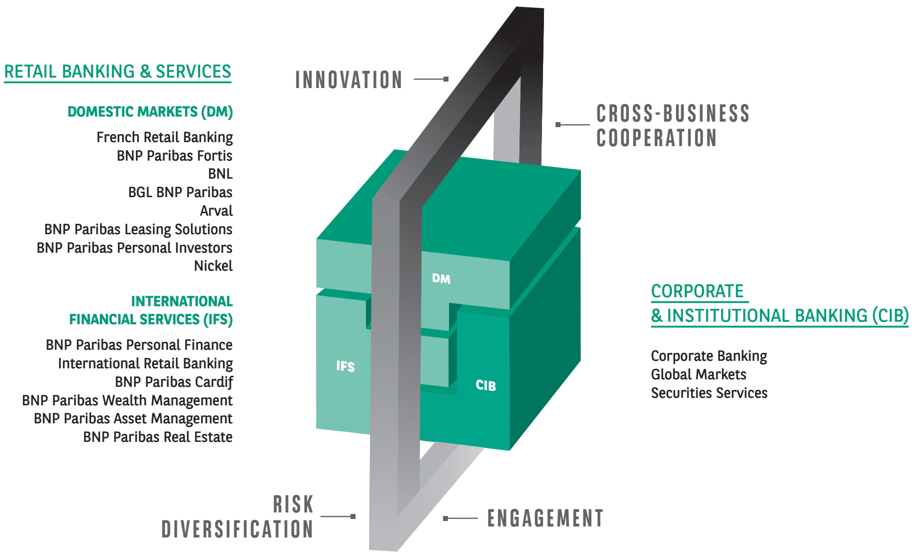
1.4 Presentation of operating divisions and business lines



RETAIL BANKING & SERVICES

Retail Banking & Services includes Retail Banking networks and specialised financial services in France and abroad. It is divided into Domestic Markets and International Financial Services. Established in more than 60 countries and employing over 150,000 people, Retail Banking & Services accounted for 73% of the 2019 revenue generated by BNP Paribas' operating divisions.

DOMESTIC MARKETS

Domestic Markets includes BNP Paribas' Retail Banking networks in the euro zone comprising France (FRB), Italy (BNL bc), Belgium (BRB, operating under the BNP Paribas Fortis brand) and Luxembourg (LRB, operating under the BGL BNP Paribas brand), as well as specialised business lines: Arval (mobility and vehicle leasing for corporates and individuals), BNP Paribas Leasing Solutions (professional equipment leasing and financing solutions), BNP Paribas Personal Investors (online savings and brokerage), and Nickel (alternative banking services).

Cash Management, Trade Finance and Factoring round out the services provided to corporate clients under the One Bank for Corporates approach, in synergy with CIB's Corporate Banking.

Wealth Management is developing its Private Banking model in the domestic markets in an integrated manner.

The purpose of Partners in Action for Customer Experience (PACE), a cross-functional team, is to support retail businesses in order to offer a better customer experience and propose new business models to domestic markets.

Launched in 2013, and designed for mobile use (smartphones and tablet), Hello bank! is the Group's digital bank in France, Belgium, Italy, Germany and Austria. With Nickel, the BNP Paribas system is responding to new banking uses in France and in 2020 is being developed in Spain.

The Bank now offers a full set of solutions adapted to the needs of its various customer bases (individuals, professionals, small businesses, corporates).

Domestic Markets employs nearly 66,000 people, including nearly 51,000 working in the 4 domestic networks (France, Italy, Belgium, Luxembourg). It serves more than 18 million customers including nearly over 900,000 professionals, small businesses and corporates in the 4 domestic networks.

BNP Paribas is the leading private bank in France[(1)] and Belgium[(1)], no. 1 in Cash Management and in Trade Finance for large corporates in Europe[(2)] and no. 2 for professional equipment financing in Europe[(3)].

(1) Source: PWM The Banker.

(2) Source: Greenwich 2019.

(3) Source: Asset Finance Europe 50 ranking published December 2019.

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FRENCH RETAIL BANKING (FRB)

With just over 26,000 employees, French Retail Banking (FRB) supports its customers with all their projects. FRB offers innovative solutions in financing, payment, wealth & asset management, and insurance to 6.8 million individual customers, 609,000 professionals and VSEs, 31,100 corporates (SMEs, mid-sized and large corporates) and some 59,000 associations. Combining the best in digital and human interaction, it provides them with broad interface capabilities, ranging from essential banking services, through a self-care solution, to customised guidance using dedicated teams and experts.

French Retail Banking is structured around 10 regions covering 158 territories, making it possible to provide all our customer bases with the right level of proximity whilst maintaining synergies between business lines.

The network of branches and centres are designed to offer all customers the right facilities for their needs:

- for individual and professional customers, more than 1,800 branches and 5,074 ATMs operating under the BNP Paribas and BNP Paribas – Banque de Bretagne brands;
- for Private Banking customers, BNP Paribas has Private Banking centres located throughout France (for customers with more than EUR 250,000 in financial assets) and 10 Wealth Management offices (for customers with more than EUR 5 million in financial assets), making BNP Paribas the leading private bank in France;
- for corporate clients and entrepreneurs, a sizeable organisation:
  - 22 general business centres specifically for corporate customers, 2 business centres specifically for customers with simple needs (Associations, French subsidiaries of foreign groups, SMEs) who seek a digital banking relationship, 3 specialised business centres (Innovation, Real Estate and Institutions/Associations/Foundations) offering tailor-made services to meet corporate customers' specific needs, as well as 2 skills centres (Bank Agency and Image and Media hub) to address corporate sector challenges,
  - 80 SME centres to support small businesses, SMEs and VSEs, and their managers, to manage their wealth planning and company life-cycle,
  - 61 WAI[1] hubs to support innovative start-ups and companies by providing products and services dedicated to their specific needs and 2 sites dedicated to innovation: WAI Paris and WAI Massy-Saclay, places for innovation and connection,
  - specialised subsidiaries, including BNP Paribas Factor, one of the European leaders in factoring, which offers client/supplier management solutions, as well as BNP Paribas Développement, a private equity provider, Protection 24, a remote surveillance firm and Portzamparc, which supports private customers, management companies and SMEs/medium-sized suppliers wishing to invest in or finance themselves on the stock market (dedicated resources were pooled in 2019 with the merger of B*Capital and Portzamparc stockbrokers),
  - customer support centres such as a business assistance service – *Service d'Assistance aux Entreprises* (SAE) and a Cash Customer Service (CCS),
  - lastly, 55 production and sales support branches, back offices that handle all transaction processing.

FRB also provides its clients with a full online relationship capability, based on:

- Hello bank!, the Group's fully online bank, with 520,000 customers in France at 31 December 2019;
- a mabanque.bnpparibas website and the mobile app "Mes Comptes", offering services used by more than 3.3 million unique customers per month, including 2.3 million on mobility (smartphones and tablets) and 1.4 million smartphone-only customers, with usage averaging 14.7 visits per month;
- 4 customer relationship centres in Paris, Lille, Orléans and Mérignac, which handle requests received by e-mail, phone, chat or secure messaging, and 3 specialist contact centres, "Net Épargne/Bourse", "Net Crédit" and "Net Assurance".

FRB accelerated its digital transformation in 2019 with simpler in-branch account opening, corporate client onboarding with *Welcome* and the introduction of instant transfers and electronic signatures. BNP Paribas is ranked as the first retail bank and came 2nd overall in the annual 2019 D-Rating survey for its digital offering.

BNP Paribas was voted best private bank in France by Euromoney, PWM-The Banker and World Finance magazines in 2019.

BNL BANCA COMMERCIALE

BNL bc provides a comprehensive range of banking, financial and insurance products and services in Italy to meet the needs of its diversified customer base consisting of:

- approximately 2.7 million[2] individuals;
- 53,000[2] Private Banking clients;
- 124,000[2] small business and VSE customers;
- approximately 11,800[2] medium and large corporates;
- 4,600[2] local authorities and non-profit organisations.

BNL bc is the 6th largest commercial bank in Italy based on its total balance sheet and customer loans[3]. Its range of products and services draw on the Group's extensive expertise and its integrated model by developing business line cooperation.

BNL bc is a market leader in loans to households, especially residential mortgages (market share of around 6.6%[3]), and has a deposit base (3.6%[3] of household current) well above its market penetration rate (3.1%[3] in terms of branch numbers).

BNL bc is also well established in the markets for corporates (market share of around 4.4%[3] in terms of loans) and local authorities, with recognised expertise in cash management, cross-border payments, project finance, structured finance and factoring via its specialist subsidiary Ifitalia (ranked 3rd in Italy[4]).

(1) *We Are Innovation.*

(2) *Active clients.*

(3) *Source: Bank of Italy 2019.*

(4) *Source: Assifact ranking by turnover.*

BNL bc is developing innovative, tailor-made, service delivery models based on a multi-channel retail network, organised by region *(direzioni regionali)* and with separate Retail Banking (including a network of financial advisors), Private Banking and Corporate Banking Departments: The retail network comprises:

- 721 branches, including Open BNL omni-channel branches (approximately 92 branches) serving customers 24/7;
- 36 Private Banking centres;
- 45 small business centres;
- 43 branches dealing with SMEs, large corporates, local authorities and public sector organisations;
- 1 trade centre in Italy for its clients' cross-border activities;
- 2 Italian desks to assist Italian companies abroad and multinational companies with direct investments in Italy.

In addition, there are 1,800 ATMs, approximately 78,000 card payment terminals (POS), a network of nearly 451 financial advisers (called "Life Bankers") and a growing range of online and mobile digital banking solutions, in particular, Hello bank!.

BNL bc has also continued to develop new digital uses with, for example, the services launched jointly with Telepass (a toll service operator in Italy) and Arval for SMEs and individuals, which can, amongst other things, combine bank accounts, toll payments and vehicle rentals as well as a range of mobility-related services: BNL bc already has over 73,000 customers for this service, 77% of whom are new customers.

BELGIAN RETAIL BANKING (BRB)

BNP Paribas Fortis is the no. 1 bank for retail customers[(1)] in Belgium and has a strong position in the corporate and small business sector, with 3.5 million customers. BNP Paribas is also the leading Private Bank in Belgium.

Corporate Banking, an area in which BNP Paribas Fortis is number one in Belgium[(2)], offers a comprehensive range of financial services to corporates, public sector entities and local authorities.

RPB serves individual customers, entrepreneurs, and small and medium enterprises through its different integrated networks, thus fitting into a hybrid banking strategy where the customer chooses between the branch network and digital channels:

- the commercial network comprises 590 branches (of which 267 are independent) and 18 centres of a new dedicated structure, the Banque des Entrepreneurs (the bank for small businesses). In addition, there are 270 Fintro franchises[(3)] and 658 retail outlets in partnership with Bpost Bank. Its 590 branches are organised as 41 branch groups reporting to 9 regions;
- RPB's digital platform manages a network of 2,734 ATMs, online banking services (Easy Banking) and mobile banking (2.1 million total aggregate active users);
- the bank is also available for customers thanks to the Easy Banking Centre which handles up to 40,000 calls per week.

The offer is completed by the Hello bank! digital bank. which has over 506,000 customers.

Private Banking services are aimed at individual customers with invested assets of more than EUR 250,000. The Wealth Management Department within Private Banking caters to customers with invested assets of more than EUR 5 million. Private Banking customers are served via 32 Private Banking centres, 1 Private Banking Centre by James[(4)] and 2 Wealth Management centres.

With a very large corporate and midcap customer base, Corporate Banking Belgium is a leader in both categories as well as a challenger in public and non-profit banking.

BNP Paribas Fortis continued its digital development and customer experience improvements. New functions were added to the Easy Banking app, making it possible to apply for consumer credit online. A new robotics and AI-based customer service centre was also set up to optimise the handling of customer queries.

LUXEMBOURG RETAIL BANKING (LRB)

With a 16%[(5)] market share of the retail banking market and 20%[(6)] of the SME market, BGL BNP Paribas is the no. 2 bank in Luxembourg.

LRB is actively involved in financing the economy and constantly fine-tunes its strategy and network to align it with changing customer behaviour patterns, with a particular focus on digital.

Drawing on the expertise of its 700 employees[(7)], LRB supports its customers to bring their plans to fruition, with:

- a network providing banking services, on a daily basis, close to 183,000 customers through:
  - 41 branches throughout the country and 128 ATMs for individual and business customers,
  - a comprehensive and diverse range of products and services offered through its innovative multi-channel presence, encompassing a branch network, online, phone and mobile banking,

(1) Source: Benchmarking Monitor 2019.

(2) Source: Greenwich 2019, in terms of market penetration.

(3) In December 2019, Fintro had 270 branches, 1,326 employees and EUR 11.52 billion in assets under management (excluding insurance business) for 324,456 active clients.

(4) Private Banking centre providing remote services through digital channels.

(5) Source: TNS ILRES – Bank Survey 2019.

(6) Source: TNS ILRES – SME Bank Survey 2018.

(7) Excluding functions.

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- a remote investment advisory service, the online savings and investment specialist, with a dedicated team of financial advisers to assist customers in managing their portfolios;
- a Corporate Bank serving 1,800 corporates, with dedicated business managers;
- a Private Bank organised around 5 centres offering tailored financial and asset management services to 3,500 customers.

ARVAL

Arval is the BNP Paribas subsidiary specialising in full service vehicle leasing and mobility. It offers corporate clients (from large multinationals to small and medium enterprises), their employees and individuals, customised solutions that optimise their mobility.

Arval offers services related to vehicle leasing (financing, insurance, maintenance, tyres, etc.), additional mobility solutions (car sharing, bike sharing, carpooling etc.) and digital tools for fleet managers and drivers to facilitate the day-to-day use of their vehicles. To support its customers with their energy transition strategy, Arval also launched its "SMaRT" (Sustainable Mobility and Responsibility Targets) approach.

Arval had over 7,000 employees at the end of 2019, in the 27 countries where the Company operates, and managed a total leased fleet of nearly 1.3 million vehicles. Arval operates primarily in Europe where it is the market leader. Arval relies, in addition, on strategic partnerships, thanks to the Element-Arval Global Alliance, the world leader in the sector, with a total of more than 3 million vehicles in 50 countries.

As an operator committed to innovation in the mobility sector, Arval jointed the MaaS (Mobility-as-a-Service) Alliance. The MaaS Alliance is a public-private partnership which aims to create the foundations required for a common approach to MaaS: integrating various forms of transport services into a single mobility service on demand.

BNP PARIBAS LEASING SOLUTIONS

BNP Paribas Leasing Solutions offers corporates and small business clients leasing and finance solutions for equipment for business use.

As a major player in the usage economy, BNP Paribas Leasing Solutions gives corporates the flexibility they need to stay competitive and to grow both sustainably and responsibly.

With close to 3,300 employees, BNP Leasing Solutions supports its customers' and partners' growth in 20 countries in Europe, but also in China, the United States and Canada.

These solutions are offered via three sales channels:

- Industrial partners (professional equipment manufacturers, distributors and software publishers), with finance solutions for their end customers;
- Corporates, with leasing and fleet management offers;
- BNP Paribas banking network business customers, by supporting their investment plans.

BNP Paribas Leasing Solutions finances in particular two main categories of equipment:

- Logistics rolling stock: farm machinery, construction and public works equipment, light commercial and industrial vehicles;
- Technological equipment: IT, office equipment, telecoms, medical and specialised technologies.

In 2019, BNP Paribas Leasing Solutions financed over 346,000 projects totalling EUR 14.1 billion. Its total outstandings under management at the end of December 2019 amounted to EUR 34 billion[(1)].

Along with Leasing Solutions and Arval, BNP Paribas is number 2 in corporate leasing in Europe[(2)].

BNP PARIBAS PERSONAL INVESTORS

BNP Paribas Personal Investors is a digital banking and investment services specialist.

It offers a broad range of banking, credit, savings and short- to long-term investment services to 3.7 million customers, on mobile applications, online, by phone or face to face. It provides decision-making tools, advice and analyses.

Personal Investors also provides services and its IT platform to independent financial advisors, asset managers and fintechs. Services include market access, transactions, account management and custody services.

Covering Germany, Austria, Spain, and India, Personal Investors currently has over 4,300 employees:

- In Germany, Personal Investors operates under three brand names, Consorsbank for individual customers, DAB BNP Paribas for B2B and Private Banking Germany customers, in conjunction with BNP Paribas Wealth Management, for wealthy customers. It is the 4th largest full-service direct bank in the market[(3)] by number of customers and the 2nd largest online broker by number of orders executed by individuals[(4)]. Personal Investors offers its services to nearly 1.6 million customers in Germany.
- In India, Sharekhan is the 5th largest online broker[(5)]. Its footprint extends to 575 towns through a network of 145 branches and over 3,000 franchisees, serving 2.0 million customers.
- In Austria, Hello bank! Austria is the 5th largest online bank in the Austrian market[(6)]. It serves more than 78,000 customers. In Spain, Personal Investors Spain offers its services to individual customers and acts as a broker on the Spanish stock exchange.

(1) O/w 13.4 billion in outstandings across the 4 Domestic Markets retail networks.

(2) Source: Asset Finance Europe 50 ranking, published in December 2019.

(3) Excluding captive full-service direct banks of automobile makers.

(4) Financial communication from major competitors.

(5) Ranking based on data communicated by the National Stock Exchange in India.

(6) Ranking based on data from modern-banking.at.

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NICKEL

With the acquisition of Compte Nickel in 2017, BNP Paribas responded in France to customers' need to pay, and be paid, via a simple and handy digital service. Nickel complements the Group's French retail banking services which now offer a full range of solutions adapted to the needs of the various customer bases.

Nickel is the 3rd largest retail distribution network in France with over 5,500 *buralistes* and is preparing its launch in Spain.

Nearly 1.5 million Nickel accounts had been opened as at 31 December 2019.

INTERNATIONAL FINANCIAL SERVICES

International Financial Services comprises the following activities serving a broad range of individual, corporate and institutional customers:

- International Retail Banking, which combines Retail Banking activities in 15 countries outside the euro zone, where it deploys BNP Paribas' integrated model to serve individuals, SMEs, professionals, and corporates;
- Personal Finance, offering credit solutions to individuals in around 30 countries through strong brands such as Cetelem, Cofinoga or Findomestic;
- BNP Paribas Cardif, providing savings and protection solutions in 34 countries to insure people, their projects and assets;
- 3 leading specialist businesses in Wealth and Asset Management:
  - BNP Paribas Wealth Management: a global benchmark in Private Banking with close to 7,000 employees, an international presence particularly in Europe and in Asia, and EUR 393 billion in assets under management,
  - BNP Paribas Asset Management: a significant player in asset management, it has more than 2,400 employees in 33 countries, with EUR 440 billion in assets under management,
  - BNP Paribas Real Estate Services: a leading provider of real estate services to corporates in Continental Europe, with over 4,800 employees, in 32 countries and EUR 30 billion in assets under management.

International Financial Services employs close to 79,000 people in more than 60 countries and enjoys strong positions in the key development regions for the Group, the Asia-Pacific region and the Americas, where it offers BNP Paribas' products and services to customers.

INTERNATIONAL RETAIL BANKING (IRB)

IRB includes retail banking for individuals, professionals and corporates in 15 non-euro zone countries. It is structured around 3 regions:

- United States;
- Central Europe, Eastern Europe and Turkey;
- Africa.

IRB also has a stake in China in Bank of Nanjing.

Founded on solid local knowledge, IRB uses the BNP Paribas universal integrated model and its varied expertise to offer a wide variety of financial and non-financial services.

IRB supports its customers sustainably and responsibly across all its regions.

IRB covers 3 business lines:

- Retail Banking, where multichannel and local services (over 2,444[(1)] branches) serve over 15 million individual customers and SMEs;
- Wealth Management, in conjunction with the corresponding business line within International Financial Services;
- Corporate Banking, with a network of 77 business centres, 24 trade centres and 13 desks for multinational companies, providing local access to BNP Paribas offers and support in all countries, in cooperation with CIB.

BancWest

After the sale of First Hawaiian Bank, the Retail Banking business in the United States is conducted solely through Bank of the West[(2)], a subsidiary of BancWest Corporation since 1998.

Bank of the West currently serves over 2 million customers. It has over 9,700 employees[(3)], 534 branches and total assets estimated at USD 92.9 billion as at 31 December 2019. It ranks as the 8th[(4)] largest commercial bank in the western United States in terms of deposits.

Bank of the West markets a very broad range of Retail Banking products and services to individuals, small businesses and corporate clients, through branches and offices in 24 States, primarily in western and mid-western America. It also has strong positions across the United States in several specialised financing activities, such as marine, recreational vehicles, and agribusiness. The bank is expanding its business, especially in the corporate, Wealth Management and SME segments.

(1) Total branches, including those in China and Gabon, entities consolidated under the equity method.

(2) First Hawaiian Bank had been reclassified under assets to be sold since 30 June 2018 in accordance with IFRS 5 and transferred to the Corporate Centre as of 1 October 2018 after the disposal of 13.2% on 8 May 2018, 15.5% on 31 July and 14.9% on 5 September 2018. The remaining stake was sold on 30 January 2019.

(3) Excluding overtime; including integrated functions and temporary staff.

(4) Source: S&P Global Market Intelligence, based on deposits in the western United States at 30 June 2019.

Bank of the West had 720,000 active digital customers[(1)], at the end of December 2019. The bank is also part of the Real Time Payment network operated by The Clearing House.

Europe-Mediterranean

With close to 30,700 employees and a network of more than 1,910 branches, Europe-Mediterranean now serves close to 13.5 million customers across 14 countries. The entity includes the banks TEB in Turkey, BNP Paribas Bank Polska in Poland, UKRSIBBANK in Ukraine, BMCI in Morocco, UBCI in Tunisia, BNP Paribas El Djazaïr in Algeria, the BICIs of 7 countries in Sub-Saharan Africa and a partnership in Asia (Bank of Nanjing in China).

BNP Paribas Bank Polska unified its information system, marking an important milestone in the integration of the core banking activities of Raiffeisen Bank Polska ("Core Bank"), which merged with BGŻ BNP Paribas, on 31 October 2018. This transaction strengthened the bank's position as the 6th largest bank on the Polish market with over 3.7 million customers.

The digital offering continued to grow with in particular CEPTETEB in Turkey which has over 850,000 customers and offers a range of functions and tools specifically for SME customers via the new mobile app, CEPTETEB İŞTE. BNP Paribas in Poland also added functions to its *Go Mobile* mobile account management app. In Morocco, BMCI launched a unique range of financial and non-financial digital services via its two subsidiaries created in 2019, Digifi and Digiserv.

BMCI came second in the banking sector in the VIGEO EIRIS ranking of the most responsible enterprises within emerging markets. Lastly, at the Cannes Lions Grands Prix 2019, BNP Paribas Bank Polska won an award for its campaign to support women and promote equal opportunities.

PERSONAL FINANCE

BNP Paribas Personal Finance (PF) is the BNP Paribas Group's consumer credit specialist via its consumer loan business activities. With close to 20,800 employees in some 30 countries, BNP Paribas Personal Finance ranks as the leading consumer credit specialist in Europe[(2)].

Through its brands such as Cetelem, Crédit Moderne, Findomestic and AlphaCredit, Personal Finance provides a full range of consumer loans at point of sale (retail stores and car dealerships) or through its customer relations centres, websites and mobile apps.

BNP Paribas Personal Finance is also developing an active strategy of partnerships with retail chains, automobile makers and dealers, web merchants and other financial institutions (banking and insurance), drawing on its experience and its ability to integrate services tailored to the activity and commercial policy of its partners.

BNP Paribas Personal Finance also strengthened the consistency of its global brand portfolio to support the growth of its business activities and to respond to new communications practices.

The consumer credit business also operates within the BNP Paribas Group's Retail Banking network in some non-domestic countries.

BNP Paribas Personal Finance was voted best securitisation issuer[(3)] in Europe, for its Noria 2018 consumer credit securitisation in France and was also Top Employer 2019 in South Africa, Italy, Spain and Portugal.

Digital transformation is at the heart of its strategic plan. In total, over 240 million self care transactions were performed by customers in 2019 (85% of the total), over 5.8 million contracts were signed electronically (more than 56% of the total) and over 82% of monthly statements were digitalised.

The business grew its digital banking activity with the launch in Italy, of an offering of innovative daily banking products and services to Findomestic customers. The Italian subsidiary chose to fully integrate consumer credit and daily banking, both in terms of the complementary nature of the offerings, sales structures and even customer interfaces.

Financial education and e-inclusion are key to the citizen engagement strategy. As a major player in the field of responsible credit®, over the last 10 years, BNP Paribas Personal Finance, under its various brand names, has developed and promoted budget management with the aims of debt prevention and supporting social and economic inclusion. In 2019, 50,000 people benefited from these programmes worldwide.

In addition, under the aegis of the Fondation de France, the Cetelem Foundation's mission is to promote and encourage digital inclusion and support general interest projects selected on the basis of three key areas of intervention: access, good practice and the digital divide.

BNP PARIBAS CARDIF

For over 45 years, BNP Paribas Cardif has designed, developed and marketed savings and protection products and services to insure people, their projects and their assets.

Today, with a geographic presence in 34 countries, BNP Paribas Cardif provides saving solutions to build and grow capital, and to prepare for the future, through guaranteed capital products, unit-linked funds, or Euro-growth contracts.

As a world leader in credit protection insurance, BNP Paribas Cardif also offers non-life insurance, health insurance, budget insurance, income protection and means of payment insurance, protection against unforeseeable events (unemployment, injury, death), and personal data protection, to meet consumers' changing needs.

(1) Customers using digital banking services at least once a month.

(2) Source: Annual Reports published by companies specialised in consumer credit. In terms of revenues from consumer credit business.

(3) Source: Global Capital.

1

Building on a unique model, BNP Paribas Cardif co-creates its products and services with more than 500 of the BNP Paribas Group's internal and external distribution partners. This multi-sector partner network comprises banks, credit institutions, financial institutions, car manufacturers, retailers, telecoms, brokers and financial advisors.

In 2019, BNP Paribas Cardif entered into two major alliances. In Latin America, BNP Paribas Cardif and Scotiabank signed a strategic bancassurance alliance. This 15-year strategic alliance provides for the development of protection and insurance solutions for Scotiabank's 9 million customers in Chile, Colombia, Mexico and Peru. BNP Paribas Cardif's multichannel and analytics expertise will enable Scotiabank to offer innovative solutions and new experiences for its customers in these countries.

In addition, in the United Kingdom, Sainsbury's Bank and Argos, the BNP Paribas insurance arm, partnered to launch Sainsbury's Bank's Pet insurance.

WEALTH MANAGEMENT

BNP Paribas Wealth Management encompasses BNP Paribas' Private Banking activities and caters for all the wealth management and financial needs of a clientele of wealthy individuals, shareholder families and entrepreneurs.

With EUR 393 billion in assets under management in 2019, and close to 7,000 employees, BNP Paribas Wealth Management is a world leader in the Private Banking sector and the largest Private Bank in the euro zone.

Operating in Europe, Asia, the Middle East and the United States, BNP Paribas Wealth Management is now the European domestic market leader and continues to be a major global player in Europe, Asia and the United States.

In 2019, the business grew organically in the German and Asian markets, and via acquisitions following the integration of the Private Banking business of ABN Amro in Luxembourg and Raiffeisen in Poland, acquired in 2018.

Relying on the BNP Paribas integrated model, BNP Paribas Wealth Management benefits from the Group's full range of resources and is structured to support its customers in different markets. In Europe and the United States in particular, the development of the Private Banking business is backed by BNP Paribas' Retail Banking networks. In Asia, the private bank is supported by the Bank's historic presence in the market and by Corporate & Institutional Banking's businesses to meet the most sophisticated needs.

To meet the specific needs of its entrepreneur customers, its experts create tailor-made solutions to build bridges between their private and business wealth in order to devise a wealth management strategy.

Due to its global approach, international network of specialists and customised solutions, BNP Paribas Wealth Management offers high value-added products and services, tailored to its customers' needs and aspirations:

- wealth planning services;
- financial services: advisory services in asset allocation, selection of investment products, discretionary portfolio management;
- customised financing;
- expert diversification advice: vineyards, artworks, real estate or philanthropy;
- sustainable investments: supporting its customers in their sustainable investment planning and combining financial performance with social and environmental impact.

Innovation is at the heart of its offering: BNP Paribas Wealth Management continues to expand its range of digital solutions, thus offering a unique experience tailored to each individual customer's journey.

2019 was marked by the growth of sustainable development and responsible investment-themed products and services with, in particular, the roll out of the *myImpact* digital tool which is used to help define customers' impact profile.

A new "E-private" service model was also launched in France, offering the most independent customers a fully remote relationship using electronic signatures, new remote contact methods, as well as services tailored to their needs and level of assets.

BNP Paribas Wealth Management was recognised in 2019 as:

- Best Private Bank in the world(1);
- Best Private Bank in Europe(2) for the eighth year running, in France for the seventh time in eight years(3), no. 1 in Belgium(3), no. 1 in Italy for the fifth consecutive year(4) as well as in Luxembourg(5), Poland(5), Monaco(5), Turkey(4) and Morocco(1);
- Best Private Bank in Hong Kong(6)
- Best Private Bank in the Western United States(1);
- Best Private Bank in the Middle East and North Africa(7);
- Best Private Bank for high net worth individuals in Western Europe(5);
- Best Private Bank for philanthropic advice(7), and digital culture(3).

(1) Global Finance.

(2) Private Banker International.

(3) PWM.

(4) World Finance.

(5) Euromoney.

(6) Asset Asian Awards.

(7) WealthBriefing Awards.

BNP PARIBAS ASSET MANAGEMENT

BNP Paribas Asset Management is the asset management business of BNP Paribas and has over 2,400 employees. Through the BNP Paribas integrated model, it has access to a broad international client base and has close relationships with BNP Paribas' distribution networks. The Company has EUR 440 billion assets under management and over 520 investment professionals. BNP Paribas Asset Management has a major international presence with more than 70% of its clients in Europe, of which a large majority are outside of France, and a significant number in Asia Pacific (approximately 20% of its assets under management and 25% of its employees).

BNP Paribas Asset Management offers investment solutions for individual investors (through internal distributors – BNP Paribas Private Banking and Retail Banking – and external distributors), corporate and institutional investors (insurance companies, pension funds, official institutions and consultants). Its aim is to offer high value-added solutions thanks to a broad range of expertises in Equities, Fixed Income, Private Debt & Real Assets and Multi-Asset, Quantitative and Solutions (MAQS). BNP Paribas Asset Management was also recognised by the 2019 *Corbeilles Mieux Vivre Votre Argent* Prize, with four awards for the best performing fund ranges offered to BNP Paribas retail clients.

BNP Paribas Asset Management's priority is to achieve long-term sustainable investment returns for its clients by placing sustainability at the heart of its strategy and investment decisions. As such, and as part of its Global Sustainability Strategy, BNP Paribas Asset Management reaffirmed its commitment in 2019 by transforming its active flagship range into a 100% sustainable offering, involving a rigorous process for integrating ESG criteria into all its funds.

BNP Paribas Asset Management also completed its industrialisation with the roll out of Aladdin software for its management platform.

BNP PARIBAS REAL ESTATE

With its extensive range of services, BNP Paribas Real Estate Services can support its customers across all stages of the property life cycle, from building design to everyday management:

- Property Development – 117,000m² of commercial real estate and construction begun on 2,500 housing units in 2019, in France and in Frankfurt in Germany;
- Advisory (Transaction, Consulting, Expertise) – 6 million m² sold and EUR 31 billion in investment supported in 2019, including the largest transaction ever recorded in Germany/the sale of the Millenium portfolio for EUR 2.8 billion;
- Investment Management – EUR 30.1 billion in assets under management (AuM) in Europe, mainly in France, Germany and Italy;
- Property Management – EUR 43.7 millions m² of commercial real estate managed in Europe.

This multi-sector offering covers all asset classes: offices, homes, warehouses, logistics platforms, retail, hotels, serviced residences, etc.

With over 4,800 employees, the Group can offer a wide array of services, based on the needs of clients, whether they are institutional investors, owners, corporates (SMEs, large corporate groups), public entities, local authorities or individuals.

With its geographic network in 14 countries on this continent, BNP Paribas Real Estate is one of Europe's leaders in commercial real estate. Its major markets are France, Germany and the United Kingdom. The Company also has platforms in Hong Kong, Dubai and, since 2019, in Singapore, as well as a comprehensive network of business alliances with local partners in some fifteen other countries, including the United States.

In residential development, BNP Paribas Real Estate operates for the most part in France's major cities, but has also developed projects in London, Milan and Rome.

CORPORATE AND INSTITUTIONAL BANKING

CORPORATE & INSTITUTIONAL BANKING

With close to 35,000 people in 55 countries, BNP Paribas CIB serves two types of customers – business and institutional (banks, insurance companies, assets managers, etc.) – tailor-made solutions in capital markets, securities services, financing, cash management and financial advice.

Acting as a bridge between corporate and institutional clients, it aims at connecting the financing needs from corporate clients with institutional clients seeking investment opportunities. In 2019, 27% of BNP Paribas' revenues from operating divisions were generated by BNP Paribas CIB.

The CIB's streamlined and efficient organisation is designed to meet the needs of BNP Paribas' corporate and institutional clients. CIB is thus organised around three main businesses:

- Corporate Banking, with its own organisation in each region;
- Global Markets, grouping together all capital market activities; and
- Securities Services.

CIB is present in three main regions:

- EMEA (Europe, Middle East, Africa);
- Americas;
- APAC (Asia-Pacific).

2019 Awards

- Euro Bond House of the Year (IFR Awards 2019);
- FX Derivatives House of the Year (IFR Awards 2019);
- Green Bond Lead Manager of the Year for Corporates (Environmental Finance Bond Awards 2019);
- Most Impressive House for Corporate Bonds (Global Capital Bond Awards 2019);
- Research & Strategy House of the Year (Global Capital Derivatives Awards 2019);
- Derivatives House of the Year (Energy Risk Awards 2019);
- Currency Derivatives House of the Year (Risk Awards 2020);
- Best Bank for Financing, Western Europe (Euromoney – July 2019).

CORPORATE BANKING

Corporate Banking combines services relating to debt financing solutions (traditional loans and specialised financings, including export financing, project financing, acquisition financing and leveraged financing), mergers and acquisitions (advisory mandates for acquisitions or disposals, strategic financial advice, privatisation advice, etc) and primary activities on the equity markets (IPOs, capital increases, convertible and exchangeable bond issues, etc.), and all transaction banking products (liquidity management, cash management, deposit collection and international trade transactions). The full range of products and services is offered to customers all over the world. To better anticipate their needs, the teams are structured by geographic area, thereby combining global expertise and local knowledge. In addition, tasked with developing and managing long-term client relationships, the Corporate Coverage teams also provide access to the BNP Paribas' global product offerings and extensive international network.

Thanks to this set-up and the strong coordination between the regions, any client entering a business centre (One Bank) can have access to a global Corporate Banking platform and can benefit from the expertise of all other business centres for its activities.

In EMEA, Corporate Banking activities have a geographic presence in 34 countries. This set-up reinforces the One Bank for Corporates approach developed in close cooperation with the Group's four domestic markets and included a network of 66 trade centres in 2019. Global Banking EMEA now combines financing activities (debt and equity), mergers and acquisitions advice, securitisation, syndication and distribution of CIB on the Capital Markets platform, a joint venture with Global Markets.

In Asia Pacific, Corporate Banking and Advisory activities encompass the full suite of M&A advisory services, financing, capital raising (debt and equity capital markets) and transaction banking (cash management, international trade, related risk hedging services, deposit taking). Corporate Banking offers clients comprehensive and integrated end to end banking facilities in major currencies as well as local currencies through full banking licence branches or subsidiaries in 12 different markets.

In the Americas, Corporate Banking (the "Global Banking" platform) covers several product areas to support the Bank's corporate and institutional clients. Global Credit Markets (run in conjunction with Global Markets) combines debt origination, financing, syndication, sales, trading & research, in particular, Asset Finance, High Grade Finance and Leveraged Finance. Trade & Treasury Solutions provides cash management, international trade, working capital, and liquidity solutions. Furthermore, the Investment Banking platform provides M&A capabilities as well as strategic advice for key clients and also covers several sectors. Global Banking Americas has a presence in the United States, Canada and in six Latin American countries.

2019 awards

- Western Europe's Best Bank for Financing (Euromoney Awards for Excellence – 2019);
- Western Europe's Best Bank for Transaction Services (Euromoney Awards for Excellence – 2019);
- Aviation Finance House of the Year (Airfinance Journal – 2019);
- Best Export Finance Bank (Trade Finance Awards – June 2019);
- Most Innovative Investment bank from Western Europe (The Banker awards – 2019);
- Best Bank for Trade Finance 2019 - 3rd year in a row (Global Finance – 2019).

2019 rankings

- No. 1 EMEA Syndicated Loan Bookrunner by volume, number of deals, and revenue (Dealogic, 2019);
- No. 1 in European Large Corporate Trade Finance (Greenwich Share Leaders – November 2019);
- No. 1 Cash Management and Corporate Banking by market penetration for large European Corporate (Greenwich Share Leaders – January 2020);
- No. 1 European Corporate Investment Grade DCM by volume and number of deals (Dealogic 2019);
- No. 1 EMEA Equity-Linked by volume and number of Deals (Dealogic, 2019);
- Exane BNP Paribas pan-European Survey: no. 1 Equity Sector Research (3rd consecutive year), no. 1 Developed Europe Broker, no. 1 for Pan-Europe Equity Sales and no. 1 in Corporate Access (Extel survey – June 2019).

GLOBAL MARKETS

Global Markets serves a wide range of corporate customers (companies, institutions, private banks, distributors, etc.) with investment, hedging, financing, research and market intelligence products or services across all asset classes.

Global Markets is an industry leader, with significant market shares on global stock markets, and is often ranked as one of the leading providers.

Global Markets' aim is to offer a wide range of financial products and services on the equity, interest rate, foreign exchange, local and credit markets. With over 3,200 employees, GM has global coverage, operating in a number of large-scale business centres, in particular, London, Paris, Brussels, New York, Hong Kong, Singapore and Tokyo.

The business comprises 5 global business lines, with 2 core activities:

- Fixed Income, Currencies & Commodities:
  - Foreign Exchange and Local Markets & Commodity Derivatives,
  - G10 Rates,
  - Primary & Credit Markets;
- Equity & Prime Services:
  - Equity Derivatives,
  - Prime solutions & Financing (brokerage and financing solutions).

This Global Markets offering includes a range of socially responsible capital markets financing and investment solutions designed to facilitate the energy transition.

In 2019, Global Markets also continued its selective growth strategy with target customers, signing a binding agreement with Deutsche Bank to ensure the continuity of prime brokerage and automatic execution services for asset managers and providing for the electronic transfer of all necessary technology and personnel.

2019 awards

- Most Innovative Investment Bank for Bonds (The Banker - Investment Banking Awards - September 2019);
- Research & Strategy House of the Year (Global Capital Derivatives Awards - May 2019);
- Most Impressive Bank for Corporate Bonds and for Financial Institutions (Global Capital Bond Awards – May 2019);
- Japan House of the Year (AsiaRisk Awards 2019);
- Derivatives House of the Year and Base Metals House of the Year (EnergyRisk Awards 2019).

2019 rankings

- No. 1 All bonds in Euros by volume and number of deals (Dealogic 2019);
- No. 1 All EMEA bonds (Dealogic 2019);
- No. 8 All International Bonds (Dealogic 2019);
- No. 3 All Global Green Bonds by volume (Dealogic 2019).

SECURITIES SERVICES

Securities Services is one of the major global players in securities services with assets under custody up 13.3% on 2018 to EUR 10,542 billion and assets under administration up 8.1% to EUR 2,512 billion.

Securities Services offers solutions to all participants across the investment cycle:

- Investment banks, broker-dealers, banks and market infrastructures (sell-side operators) are offered solutions in execution services, derivatives clearing, local and global clearing, settlement and custody for all asset classes worldwide. Outsourcing solutions for middle and back-office activities are also provided;
- Institutional investors – asset managers, hedge funds, private equity funds, real estate and sovereign wealth funds, insurance companies, pension funds, fund distributors and promoters (buy-side operators) – enjoy a wide range of services: global custody, custodian and fiduciary services, transfer agent and fund distribution support, fund administration and middle-office outsourcing, investment, risk assessment and performance reporting;
- Issuers (originators, arrangers and corporates) have access to a wide range of fiduciary management services: securitisation and structured finance services, debt agency services, issuer advisory, stock-option plans and employee shareholding management, shareholder services and management of Shareholders' Meetings;
- market and financing services are offered to all operators: securities lending and borrowing, foreign exchange, credit and collateral management, tripartite collateral management, trading service and financing.

In 2019, Securities Services signed an agreement with Allfunds, one of the main fund distribution platforms in the world, to develop new generation services. Securities Services also acquired a strategic interest in Fintech AssetMetrix in order to extend and digitise its services to asset management companies and private capital fund investors.

2019 awards

- Best Transaction Bank for Securities Services (The Banker – September 2019);
- Custodian of the Year (Asia Risk Awards 2019);
- European Hedge Fund Administrator of the Year (Funds Europe Awards 2019);
- Best Bank for Cross Border Custody (AsianInvestor's Asset Management Awards 2019 – April 2019);
- 5 Awards including Best Custodian for Stock Connect (The Asset Triple A Awards – June 2019).

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CORPORATE CENTRE

PRINCIPAL INVESTMENTS

Principal Investments manages the Group's portfolio of unlisted and listed industrial and commercial investments with a view to supporting clients and extracting value over the medium and long term. The Private Equity Investment Management unit specialises in providing support for transmission and development projects of unlisted companies by taking minority equity stakes or through private debt financings. It also provides indirect financing support for the economy through private equity funds. The Listed Investment Management unit acquires and manages minority interests in predominantly French listed companies.

PERSONAL FINANCE'S MORTGAGE BUSINESS

In the context of the Group's 2014-2016 business development plan, Personal Finance's Mortgage Business, a significant portion of which is managed in run-off, was allocated to the Corporate Centre as at 1 January 2014.

1.5 BNP Paribas and its shareholders

SHARE CAPITAL

At 31 December 2018, BNP Paribas SA's share capital stood at EUR 2,499,597,122 divided into 1,249,798,561 shares. Details of historical change in share capital are provided in chapter 6, note 6a *Changes in share capital*.

No transactions affecting the share capital took place in 2019 and so, as at 31 December 2019, BNP Paribas share capital still stood at EUR 2,499,597,122, divided into 1,249,798,561 shares with a par value of EUR 2 each.

The shares are all fully paid-up and are held in registered or bearer form at the choice of their holders, subject to compliance with the relevant legal provisions. **None of the Bank's shares entitles their holders to an increased dividend or double voting rights or limit the exercise of voting rights.**

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CHANGES IN SHARE OWNERSHIP

CHANGES IN THE BANK'S OWNERSHIP STRUCTURE OVER THE LAST THREE YEARS

Dates	31/12/2017			31/12/2018			31/12/2019		
Shareholders	Number of shares *(in millions)*	% of share capital	% of voting rights	Number of shares *(in millions)*	% of share capital	% of voting rights	Number of shares *(in millions)*	% of share capital	% of voting rights
SFPI(1)	96.55(2)	7.7%	7.7%	96.55(2)	7.7%	7.7%	96.55(2)	7.7%	7.7%
BlackRock Inc.	63.22(3)	5.1%	5.1%	63.22(3)	5.1%	5.1%	62.76(4)	5.0%	5.0%
Grand Duchy of Luxembourg	12.87	1.0%	1.0%	12.87	1.0%	1.0%	12.87	1.0%	1.0%
Employees	50.22	4.0%	4.0%	51.58	4.1%	4.1%	52.36	4.2%	4.2%
■ o/w Group FCPE(5)	36.27	2.9%	2.9%	37.78	3.0%	3.0%	39.17	3.1%	3.1%
■ o/w direct ownership	13.95	1.1%	1.1%	13.80	1.1%	1.1%	13.19	1.1%(*)	1.1%(*)
Corporate officers	0.16	NS	NS	0.19	NS	NS	0.20	NS	NS
Treasury shares(6)	1.23	0.1%	-	1.16	0.1%	-	1.16	0.1%	-
Retail shareholders	45.3	3.6%	3.6%	48.70	3.9%	3.9%	43.50	3.5%	3.5%
Institutional investors	904.42	76.2%	76.3%	957.26	76.6%	76.7%	961.10	76.9%	77%
■ European	536.60	44.3%	44.4%	559.04	44.7%	44.8%	572.42	45.9%	45.9%
■ Non-European	367.82	31.9%	31.9%	398.22	31.9%	31.9%	388.68	31.1%	31.1%
Other and unidentified	74.89	2.2%	2.2%	18.27	1.5%	1.5%	19.30	1.6%	1.6%
TOTAL	**1,248.86**	**100%**	**100%**	**1,249.8**	**100%**	**100%**	**1,249.8**	**100%**	**100%**

(1) *Société de Participations et d'Investissement: a public-interest limited company (société anonyme) acting on behalf of the Belgian State.*
(2) *According to the statement by SFPI, AMF Document No. 217C1156 dated 6 June 2017.*
(3) *According to the statement by BlackRock, AMF Document No. 217C0939 dated 9 May 2017.*
(4) *According to the statement by BlackRock, AMF Document No. 219C0988 dated 19 June 2019.*
(5) *The voting rights of the FCPE (profit-sharing scheme) are exercised, after the decision taken by the Supervisory Board, by its Chairman.*
(6) *Excluding trading desks' inventory positions.*
(*) *Of which 0.5% for the shares referred to in article L.225-102 of the French Commercial Code allowing the termination of the threshold above which the appointment of an employee representative director must be proposed.*

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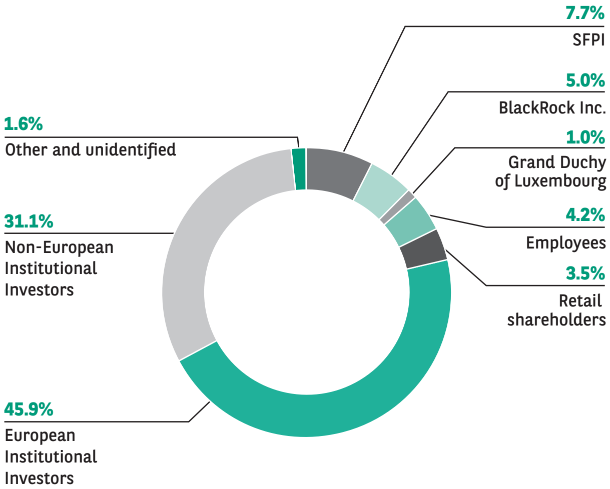
BNP PARIBAS OWNERSHIP STRUCTURE AT 31 DECEMBER 2019 (% OF VOTING RIGHTS)



To the best of the Company's knowledge, no shareholder, other than SFPI *(Société Fédérale de Participations et d'investissements)* and BlackRock Inc., held more than 5% of the capital or voting rights as at 31 December 2019.

SFPI became a shareholder in BNP Paribas at the time of the integration with the Fortis group in 2009. During 2009, SFPI made two threshold crossing disclosures to the Autorité des Marchés Financiers (AMF):

- on 19 May 2009 (AMF disclosure No. 209C0702), SFPI disclosed that its interest in BNP Paribas' capital and voting rights had risen above the 5% and 10% disclosure thresholds following its transfer of a 74.94% stake in Fortis Bank SA/NV in return for 121,218,054 BNP Paribas shares, which at the time represented 9.83% of BNP Paribas' share capital and 11.59% of its voting rights. The disclosure stated in particular that neither the Belgian government nor SFPI were considering taking control of BNP Paribas.

  At the same time, BNP Paribas notified the AMF (AMF disclosure No. 209C0724) that an agreement had been reached between the Belgian government, SFPI and Fortis SA/NV (renamed Ageas SA/NV at end-April 2010), giving Fortis SA/NV an option to buy the 121,218,054 BNP Paribas shares issued as consideration for SFPI's transfer of its shares in Fortis Bank, with BNP Paribas having a right of subrogation regarding the shares concerned;
- on 4 December 2009 (AMF disclosure No. 209C1459), SFPI disclosed that it owned 10.8% of BNP Paribas' capital and voting rights. This change resulted mainly from:
  - BNP Paribas' capital increase through the issuance of ordinary shares in 2009,
  - the capital reduction through the cancellation, on 26 November 2009, of preferred shares issued on 31 March 2009 to *Société de Prise de Participation de l'État*.

On 27 April 2013, the Belgian government announced the buy-back via SFPI of the purchase option that had been given to Ageas.

On 6 June 2017 (AMF disclosure No. 217C1156), SFPI disclosed that it owned 7.74% of the share capital and voting rights of BNP Paribas; this drop below the 10% capital and voting rights thresholds resulted from the sale of shares on the market.

Since then, BNP Paribas has received no threshold crossing disclosures from SFPI.

On 9 May 2017 (AMF disclosure No. 217C0939), BlackRock Inc. disclosed that its interest in BNP Paribas' capital and voting rights had risen, as at 8 May 2017 above the 5% disclosure thresholds. On this date, BlackRock held 63,223,149 BNP Paribas shares on behalf of its clients and the funds it manages.

On 18 June 2019 (AMF document No. 219C0988 dated 19 June), BlackRock Inc. stated that it held 62,764,366 BNP Paribas shares.

Since then, BNP Paribas has received no threshold crossing disclosures from BlackRock Inc.

LISTING INFORMATION

When the shareholders of BNP and Paribas approved the merger between the two banks at the Combined General Meeting of 23 May 2000, BNP shares became BNP Paribas shares. The Euroclear-France code for BNP Paribas is the same as the previous BNP code (13110). Since 30 June 2003, BNP Paribas shares have been registered under ISIN code FR0000131104. To help increase the number of shares held by retail shareholders, BNP Paribas carried out a two-for-one share split on 20 February 2002, reducing the par value of the shares to EUR 2.

BNP shares were first listed on the Cash Settlement Market of the Paris Stock Exchange on 18 October 1993, following privatisation, before being transferred to the Monthly Settlement Market on 25 October of that year. When the monthly settlement system was discontinued on 25 September 2000, BNP Paribas shares became eligible for Euronext's Deferred Settlement Service (SRD).

The shares are also traded on SEAQ International in London and on the Frankfurt Stock Exchange. Since 24 July 2006 they have been traded on the MTA International exchange in Milan. Since privatisation, a Level 1 144A ADR (American Depositary Receipt) programme has been active in the United States, where JP Morgan Chase is the depositary bank (2 ADRs correspond to 1 BNP Paribas share).

The ADRs have been traded on OTCQX International Premier since 14 July 2010 in order to provide better liquidity and clarity for US investors.

BNP Paribas has been part of the CAC 40 index since 17 November 1993 and became part of the EURO STOXX 50 index on 1 November 1999. Since 18 September 2000, it has been part of the STOXX 50 index. BNP Paribas also joined the DJ Banks Titans 30 Index, an index comprising the 30 largest banks worldwide. It is also included in the EURO STOXX Banks and STOXX Banks indices. BNP Paribas shares are also included in the main sustainable development benchmarks (see Chapter 7), including Euronext Vigeo Eiris, FTSE4Good Index Series, Dow Jones Sustainability World & Europe Indices and Stoxx Global ESG Leaders index.

All of these elements foster liquidity and share price appreciation, as the BNP Paribas share is necessarily a component of every portfolio and fund that tracks the performance of these indexes.

➤ BNP PARIBAS SHARE PERFORMANCE BETWEEN 31 DECEMBER 2016 AND 31 DECEMBER 2019

Comparison with the EURO STOXX Banks, STOXX Banks and CAC 40 indexes (rebased on share price).

Source: Bloomberg.

In the three-year period from 31 December 2016 to 31 December 2019, BNP Paribas' share price fell 12.7% from EUR 60.55 to EUR 52.83, outperforming other euro zone banks (Euro Stoxx Banks: -17.8%), European banks (Stoxx Banks: -15.9%), but significantly under performing the CAC 40 (+22.9%).

In the last year, since early 2019, BNP Paribas' share price rose 33.8% from EUR 39.48 to EUR 52.83, outperforming not only other euro zone banks (+11.1%) and European banks (+8.2%) but also outperforming the CAC 40 (+26.4%). Over this period, European banking shares were initially impacted, in the first three quarters, by uncertainties surrounding global business growth and fears surrounding the persistence of a low interest rate environment, until their valuations benefited from increased visibility in these areas, in terms of regulatory changes and certain geopolitical risks such as Brexit.

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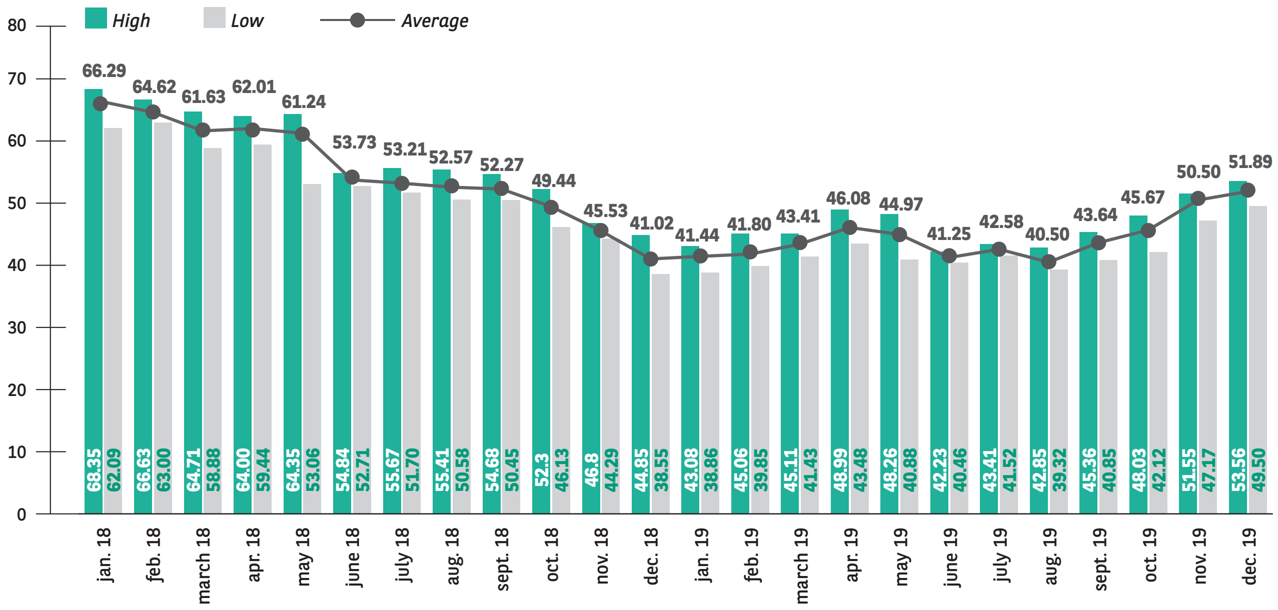
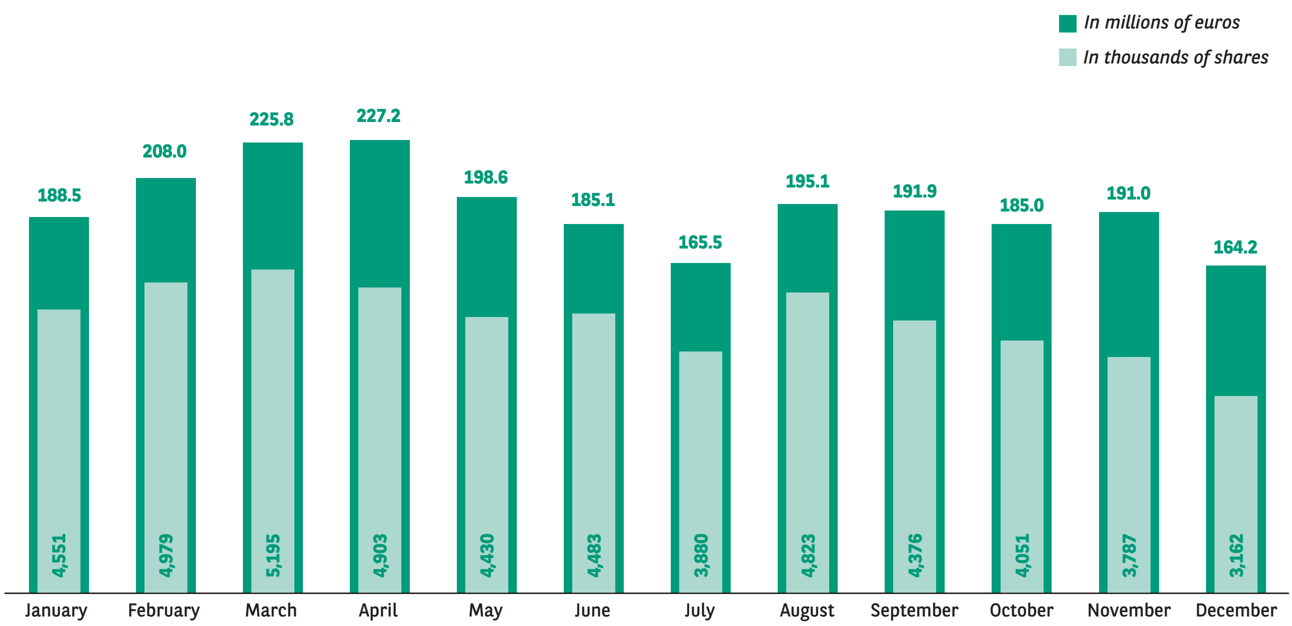
➤ BNP PARIBAS MONTHLY AVERAGES AND HIGH AND LOW MONTHLY CLOSING PRICES SINCE JANUARY 2018



Source: Bloomberg.

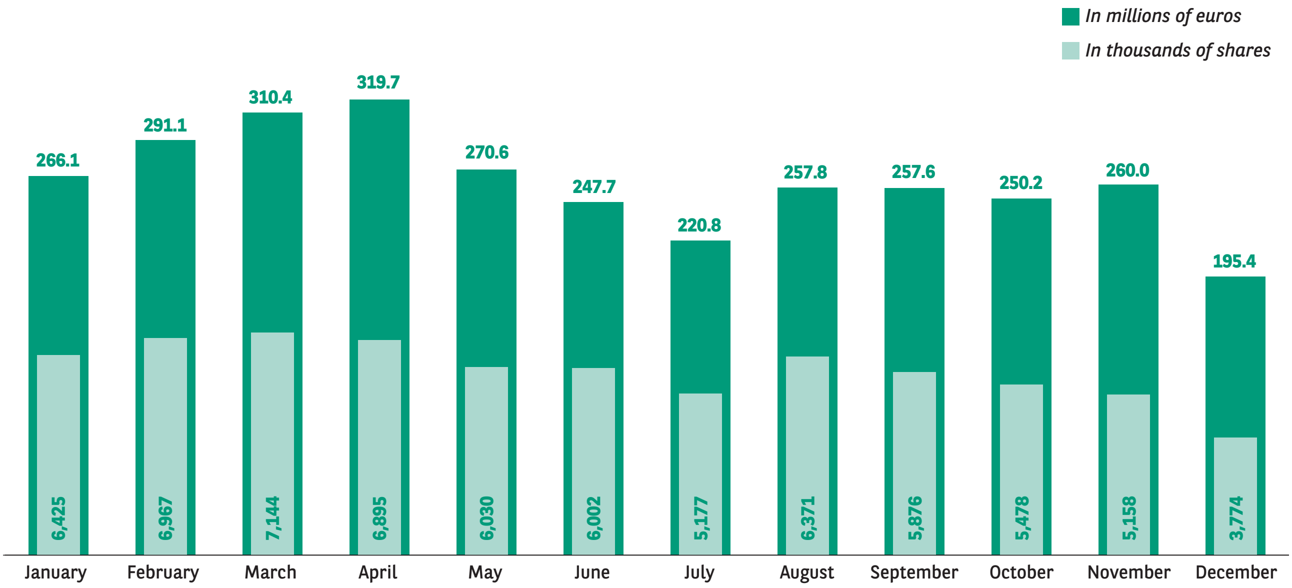
- At 31 December 2019, BNP Paribas' market capitalisation was EUR 66.0 billion, ranking it 8th among CAC 40 stocks; BNP Paribas' free float also put the bank in 6th place on the Paris market index and in 17th place in the EURO STOXX 50 index.
- In 2019 daily trading volume on Euronext Paris averaged 4,380,973 shares, up 8.06% from the previous year (4,054,122 shares per trading session in 2018). Including the volumes traded on multilateral trading facilities (MTFs), daily trading volume averaged 5,936,204 shares in 2019, down 2.68% from 6,099,424 in 2018.

➤ TRADING VOLUME ON EURONEXT PARIS IN 2019 (DAILY AVERAGE)



Source: Euronext.

TOTAL TRADING VOLUME ON EURONEXT AND MTFS IN 2019 (DAILY AVERAGE)



Source: Euronext.

KEY SHAREHOLDER DATA

In euros	2015	2016	2017	2018	2019
Earnings per share[(1)]	5.14	6.00	6.05	5.73	6.21
Net book value per share[(2)]	70.95	73.90	75.1	74.7[(*)]	79.0
Net dividend per share	2.31	2.70	3.02	3.02	3.10[(3)]
Pay-out ratio (%)[(4)]	45.0	45.0	50.0	52.72	50.03[(3)]
Share price					
High[(5)]	60.68	62.00	68.89	68.66	53.81
Low[(5)]	44.94	35.27	54.68	38.18	38.14
Year-end	52.23	60.55	62.25	39.48	52.83
CAC 40 index on 31 December	4,637.06	4,862.31	5,312.56	4,730.69	5,978.06

(1) *Based on the average number of shares outstanding during the fiscal year.*
(2) *Before dividends. Revalued net assets based on the number of shares outstanding at year-end.*
(3) *Subject to approval at the Annual General Meeting of 19 May 2020.*
(4) *Dividend distribution recommended at the Annual General Meeting expressed as a percentage of net income attributable to equity holders.*
(5) *Registered during trading.*
(*) *Impact of the first-time application of the new IFRS 9 accounting standard on shareholders' equity at 1 January 2018: -EUR 2.5 billion, i.e. €2 per share.*

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CREATING VALUE FOR SHAREHOLDERS

TOTAL SHAREHOLDER RETURN (TSR)

Calculation parameters

- Dividends are reinvested in BNP shares then in BNP Paribas shares; 50% tax credit was included until this system was abolished at the beginning of 2005.
- Exercise of preferential subscription rights during the right issues in March 2006 and October 2009.
- Returns stated are gross, *i.e.* before any tax payments or brokerage fees.

Calculation results

The following table indicates, for various periods ending on 31 December 2019, the total return on a BNP share, then on a BNP Paribas share, as well as the effective annual rate of return.

Holding period	Investment date	Share price at the investment date *(in EUR)*	Number of shares at end of calculation period	Initial investment multiplied by	Effective annual rate of return
Since privatisation of BNP	18/10/1993	36.59	5,6770	8,1967	8.35%
26 years	03/01/1994	43.31	5,1695	6,3058	7.34%
25 years	03/01/1995	37.20	5,0753	7,2077	8.22%
24 years	02/01/1996	33.57	4,9695	7,8206	8.94%
23 years	02/01/1997	30.40	4,8249	8,3848	9.68%
22 years	02/01/1998	48.86	4,6747	5,0545	7.64%
21 years	04/01/1999	73.05	4,5782	3,3110	5.87%
Since the creation of BNP Paribas	01/09/1999	72.70	4,4542	3,2368	5.94%
20 years	03/01/2000	92.00	4,4542	2,5578	4.81%
19 years	02/01/2001	94.50	4,3332	2,4225	4.77%
18 years	02/01/2002	100.4	4,1924	2,2060	4.49%
17 years	02/01/2003	39.41	2,0287	2,7195	6.06%
16 years	02/01/2004	49.70	1,9512	2,0741	4.66%
15 years	03/01/2005	53.40	1,8706	1,8507	4.19%
14 years	02/01/2006	68.45	1,8044	1,3926	2.39%
13 years	02/01/2007	83.50	1,7289	1,0939	0.69%
12 years	02/01/2008	74.06	1,6708	1,1919	1.47%
11 years	02/01/2009	30.50	1,5898	2,7537	9.65%
10 years	02/01/2010	56.11	1,5130	1,4246	3.60%
9 years	03/01/2011	48.30	1,4689	1,6066	5.41%
8 years	02/01/2012	30.45	1,4125	2,4507	11.86%
7 years	02/01/2013	43.93	1,3537	1,6279	7.21%
6 years	02/01/2014	56.70	1,3095	1,2201	3.37%
5 years	02/01/2015	49.43	1,2731	1,3607	6.36%
4 years	04/01/2016	51.75	1,2400	1,2659	6.08%
3 years	02/01/2017	60.12	1,1816	1,0384	1.26%
2 years	02/01/2018	62.68	1,1337	0,9555	-2.25%
1 year	02/01/2019	38.73	1,0744	1,4655	46.86%

COMMUNICATION WITH SHAREHOLDERS

BNP Paribas endeavours to provide all shareholders with clear, consistent, high-quality information at regular intervals, in accordance with best market practice and the recommendations of stock market authorities.

The Investor Relations team informs institutional investors and financial analysts about the Group's strategy, major events concerning the Group's business and the Group's quarterly results.

In 2020, the timetable is as follows(1):

- 5 February 2020: publication of 2019 full year results;
- 5 May 2020: publication of first quarter 2020 results;
- 31 July 2020: publication of second quarter and first half 2020 results;
- 3 November 2020: publication of third quarter and nine-month 2020 results.

Informative briefings are organised several times a year for all market participants, in particular when the annual and quarterly results are released, or on specific topics, providing senior management with an opportunity to present the BNP Paribas Group and its strategy. More specifically, a Relations Officer is responsible for liaising with managers of ethical and socially responsible funds.

The Shareholder Relations team provides information and deals with queries from the Bank's 345,000 retail shareholders (internal sources and TPI Survey as at 31 December 2019). Twice a year, shareholders receive a financial newsletter outlining the Group's main developments, and the minutes of the Annual General Meeting are sent in early July. During the year, retail shareholders in different French cities are invited to attend presentations during which the Group's accomplishments and strategy are presented by Executive Management (in 2019, for example, presentations were held in Toulouse on 17 September and in Lyon on 7 November). BNP Paribas representatives also met and spoke with nearly 400 people at the Investor Day held in Paris on 3 October 2019.

The members of **the Cercle des actionnaires de BNP Paribas** (BNP Paribas Shareholders' Group), set up in 1995, are the 43,200 retail shareholders holding at least 200 shares. They receive the financial newsletters each half-year and the minutes of the Annual General Meeting. They are also sent two printed editions of the magazine, *La Vie du Cercle*, in addition to two emails outlining forthcoming events. They are invited to attend artistic, sporting and cultural events with which BNP Paribas is associated, as well as online training sessions. These include stock trading (technical and financial analysis, portfolio diversification etc.), and economic updates sessions in partnership with the relevant BNP Paribas teams. Nearly 250 events were organised for more than 7,000 participants in 2019.

To facilitate access these services, **a website dedicated to the Cercle des Actionnaires (www.cercle-actionnaires.bnpparibas)** features all the available products and services. Each Cercle member has a personal and secure access to the site which can be used to manage their event registrations and retrieve their invitations. A **freephone number** has also been made available, **0800 666 777**; it provides the market price and allows members to leave a voice message for the Cercle team. Messages can also be sent by email to **cercle.actionnaires@bnpparibas.com**.

The **BNP Paribas website (www.invest.bnpparibas.com)**, available in French and English, offers users access to all information on the BNP Paribas Group (including press releases, key figures, coverage of the main events, etc.). All documents such as Integrated Reports and Registration documents, or Universal registration documents, can also be viewed and downloaded. The financial calendar gives the dates of important forthcoming events, such as the Annual General Meeting, results announcements and shareholder seminars. The website also features the latest share performance data and comparisons with major indexes, as well as a tool for calculating returns.

Reports and presentations relating to BNP Paribas' business and strategy aimed at all audiences (institutional investors, asset managers and financial analysts) are also available. The **"Individual Shareholder"** section shows information and features specifically designed for retail shareholders, in particular, access to information such as proposed events.

A section dedicated to **Social and Environmental Responsibility** describes the Bank's goals, the policy that it follows and its main achievements in this area.

In addition, there is a specific section dedicated to **the Annual General Meeting of Shareholders**, which includes information regarding attendance at the meeting, ways to vote and practical matters, as well as a presentation of the resolutions and the complete text of all speeches made by corporate officers. Webcasts of the Annual General Meeting can be viewed on the Bank's website. In response to the expectations of individual shareholders and investors, and to meet strict transparency and regulatory disclosure requirements, BNP Paribas regularly adds sections to its website and improves existing sections with enhanced content and new functions.

(1) Subject to change at a later date.

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SHAREHOLDER LIAISON COMMITTEE

After its formation in 2000, BNP Paribas decided to create a Shareholder Liaison Committee to help the Group improve communications with its retail shareholders. At the Shareholders' Meeting that approved the BNP Paribas merger, the Chairman of BNP Paribas initiated the process of appointing members to this committee, which was fully established in late 2000.

Chaired by Jean Lemierre, it includes ten shareholders who are both geographically and socio-professionally representative of the retail shareholder population, along with two employees or former employees. Each member serves a three-year term. When their terms expire, announcements are published in the press and/or in the Group's various financial publications, inviting new candidates to come forward. Any shareholder can become a candidate.

At its last meeting in October 2019, the members of the Liaison Committee were as follows:

- Mr Jean Lemierre, Chairman;
- Mr Adrien Besombes, resident of the Indre-et-Loire department;
- Mr Michel Cassou, resident of the Tarn department;
- Mr Patrick Cunin, resident of the Essonne department;
- Ms Anne Doris Dupuy, resident of the Gironde department;
- Mr Laurent Dupuy, resident of the Alpes-Maritimes department;
- Mr Jacques Martin, resident of the Alpes Maritimes department;
- Mr André Peron, resident of the Finistère department;
- Ms Dyna Peter-Ott, resident of the Bas-Rhin department;
- Mr Jean-Pierre Riou, resident of the Loire-Atlantique department;
- Mr Jean-Jacques Rohrer, resident of the Hauts-de-Seine department;
- Mr Ugo Cuccagna, BNP Paribas employee;
- Ms Christine Valence, BNP Paribas employee.

In accordance with the committee's Charter *i.e.* the Internal rules that all committee members have adopted, the committee met twice in 2019, on 29 March and 2 October, in addition to taking part in the Annual General Meeting.

The main topics of discussion included:

- BNP Paribas' capital structure and changes therein, particularly among "retail shareholders";
- proposals submitted to "Cercle des actionnaires" members;
- the draft 2018 Registration document, more particularly, the chapters on "Shareholder Relations", "Corporate governance" and "Social and Environmental Responsibility";
- quarterly results;
- initiatives taken in preparation for the Annual General Meeting;
- the Bank's participation in the Actionaria shareholder fair or the Investor Day;
- the presentation on "Partners in Action for Customer Experience", one of the Bank's digital transformation initiatives that particularly focuses on new customer experiences;
- the Compliance Function, presented by the Executive Committee member responsible for these issues.

DIVIDEND

At the Annual General Meeting on 19 May 2020, the Board of directors will recommend a dividend of EUR 3.10 per share (up 2.6% compared to 2019). The shares will go ex-dividend on 25 May and the dividend will be paid on 27 May 2020, subject to approval at the Annual General Meeting.

The total amount of the proposed payout is EUR 3,874 million, against EUR 3,774 million paid in 2019.

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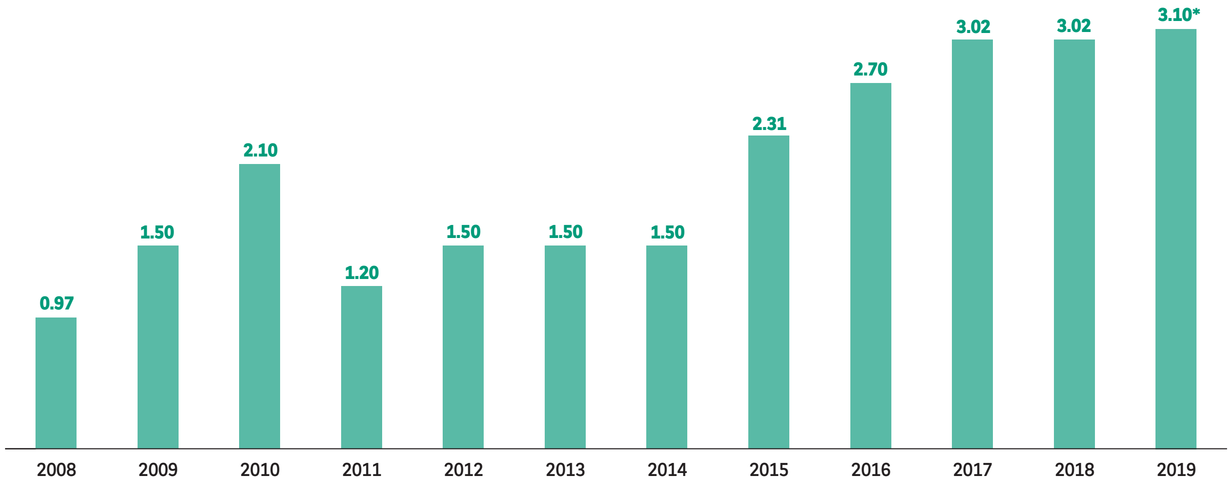
CHANGE IN DIVIDEND (IN EUROS PER SHARE)



(*) Subject to approval at the Annual General Meeting of 19 May 2020.

The 2008 divident has been adjusted for the capital increase with preferential subscription rights, completed between 30 September to 13 October 2009.

Limitation period for dividends: any dividend unclaimed five years after its due date is forfeited, as provided by law. Dividends for which payment has not been sought are paid to the Public Treasury.

BNP PARIBAS REGISTERED SHARES

At 31 December 2019, 25,926 shareholders held BNP Paribas registered shares.

REGISTERED SHARES HELD DIRECTLY WITH BNP PARIBAS

Shareholders who hold registered shares directly with BNP Paribas:

- automatically receive all documents regarding the Bank that are sent to shareholders;
- can call a **French toll-free number: +33(0)800 600 700** to place buy and sell orders[(1)] and to obtain any information;
- benefit from special, discounted brokerage fees;
- have access to "PlanetShares" (https://planetshares.bnpparibas.com), a fully secure dedicated web server, allowing them to view registered share accounts and account movements, as well as place and track orders[(1)]; this server is also available on tablets and smartphones;
- are automatically invited to Annual General Meetings without the need for an ownership certificate;
- may receive notice of meetings online;
- pay no custody fees.

Registered shares held directly with BNP Paribas cannot be registered in a PEA (Share Savings Plan), given the regulations and procedures applicable to this vehicle. Investors whose shares are held in a PEA and who want to hold them "in registered" form can opt to hold them in an administered account (see below).

REGISTERED SHARES HELD IN AN ADMINISTERED ACCOUNT

BNP Paribas is also extending its administered share account services to institutional shareholders. For institutional shareholders, this type of account combines the main benefits of holding shares in bearer form with those of holding registered shares directly with BNP Paribas:

- shares can be traded at any time, through the shareholder's usual broker;
- the shareholder can have a single share account, combined with a cash account;
- the shareholder is automatically invited to attend and vote at Annual General Meetings, without the invitation being sent through a third party;
- shareholders may receive notice of meetings and vote at Annual General Meetings online.

(1) Subject to prior signature of a "brokerage services agreement" (free of charge).

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SHAREHOLDERS' ANNUAL GENERAL MEETING

The procedures for BNP Paribas' Annual General Meetings are defined in article 18 of the Bank's Articles of association.

The Board of directors calls an Ordinary Shareholders' Meeting at least once a year to vote on the agenda set by the Board.

The Board may call Extraordinary Shareholders' Meetings for the purpose of amending the Articles of association, and especially to increase the Bank's share capital. Resolutions are adopted by a two-thirds majority of shareholders present or represented.

The combined Ordinary and Extraordinary General Meeting may be called in a single notice of meeting and held on the same date.

The Bank's last Ordinary and Extraordinary General Meeting took place on 23 May 2019 on first notice. The text of the resolutions and the video of the meeting can be viewed on the BNP Paribas website, which is where the original live webcast was shown. The composition of the quorum and the results of the votes cast on resolutions were posted online the day after the meeting. The meeting was also covered by publications in the specialist press and a specific letter was sent to shareholders summarising the meeting.

The quorum broke down as follows:

➤ BREAKDOWN OF QUORUM

	Number of shareholders	(%)	Equities	(%)
Present	1,413	10.32%	148,282,911	18.58%
Appointment of proxy	479	3.50%	228,913	0.03%
Proxy given to Chairman	6,608	48.27%	3,448,689	0.43%
Postal votes	5,189	37.91%	646,204,657	80.96%
TOTAL	**13,689**	**100.00%**	**798,165,170**	**100.00%**
of which online	10,109	73.85%	263,432,921	33.00%
				Quorum
Number of ordinary shares (excluding treasury stock)			**1,248,641,821**	**63.92%**

Of the 10,109 shareholders who took part in our last Annual General Meeting online:

- 459 had requested an admission card;
- 5,324 had given the Chairman a proxy;
- 450 had given a third party (who, by law, must also be a shareholder) a mandate/proxy;
- 3,876 had voted by post.

All resolutions proposed to the shareholders were approved.

SHAREHOLDERS' COMBINED GENERAL MEETING OF 23 MAY 2019

Results	Rate of approval
ORDINARY MEETING	
First resolution: approval of the parent company financial statements for 2018	99.47%
Second resolution: approval of the consolidated financial statements for 2018	99.68%
Third resolution: appropriation of net income for the year ended 31 December 2018 and dividend distribution	99.76%
Fourth resolution: agreements and commitments referred to in articles L.225-38 et seq. of the French Commercial Code	99.51%
Fifth resolution: authorisation for BNP Paribas to buy back its own shares	98.93%
Sixth resolution: renewal of the term of directorship of Jean-Laurent Bonnafé as a Director	95.89%
Seventh resolution: renewal of the term of directorship of Wouter De Ploey as a Director	96.05%
Eighth resolution: renewal of the term of directorship of Marion Guillou as a Director	99.35%
Ninth resolution: renewal of the term of directorship of Michel Tilmant as a Director	97.27%
Tenth resolution: renewal of the term of office of Rajna Gibson-Brandon as a Director	99.66%
Twelfth resolution: vote on the components of the compensation policy attributable to the Chairman of the Board of directors	98.17%
Twelfth resolution: vote on the components of the compensation policy attributable to the Chief Executive Officer and to the Chief Operating Officer	86.72%
Thirteenth resolution: vote on the components of the compensation paid or awarded in respect of fiscal year 2018 to Mr Jean Lemierre, Chairman of the Board of directors	98.09%
Fourteenth resolution: vote on the components of the compensation paid or awarded in respect of fiscal year 2018 to Mr Jean-Laurent Bonnafé, Chief Executive Officer	85.46%
Fifteenth resolution: vote on the components of the compensation paid or awarded in respect of fiscal year 2018 to Mr Philippe Bordenave, Chief Operating Officer	85.62%
Sixteenth resolution: advisory vote on the overall amount of compensation of any kind paid during fiscal year 2018 to executive officers and certain categories of staff	86.48%
EXTRAORDINARY MEETING	
Seventeenth resolution: Authorisation granted to the Board of directors to reduce the share capital by cancelling shares	99.63%
Eighteenth resolution: Powers to carry out formalities	99.91%

The 2019 Annual General Meeting was an additional opportunity for BNP Paribas to demonstrate its commitment to sustainable development, and to its Social and Environmental Responsibility. BNP Paribas seeks to create value consistently, to show its respect not only for traditional partners comprising shareholders, clients and employees, but also for the environment and the community at large.

For the first time, there were plans to offset - and more than offset - (thanks to ClimateSeed, an online platform launched by BNP Paribas which puts companies wishing to offset their greenhouse gas emissions in contact with carbon credit generating project developers), the carbon emissions generated by holding the Annual General Meeting. This initiative had a positive environmental impact, since it was decided to help fund an anti-deforestation project, thereby offsetting 166 tonnes of CO_2, *i.e.* much more than the emissions resulting from holding the 2019 Annual General Meeting 2019.

In addition, to ensure that Annual General Meetings represent our principles and values, a decision was made, in conjunction with the Shareholder Liaison Committee, to donate EUR 12 for every investor attending the meeting to the "Help2Help" programme, specifically developed by the BNP Paribas Foundation to encourage public-interest initiatives for which Bank staff personally volunteer their time and efforts.

The amounts collected (EUR 16,956 in 2019) are donated in addition to the funds that the Bank already grants to this programme via the BNP Paribas Foundation, which operates under the aegis of the Fondation de France. In France, total 2019 contributions were ultimately divided between 79 projects, all of which were initiated by BNP Paribas staff. Beneficiaries are located mainly in Europe (72%), Africa (23%) and 5% in the rest of the world. The sums allocated to these 79 projects (ranging from EUR 1,000 to EUR 4,000 per project selected and averaging EUR 2,500) vary depending on the size and nature of the project and, of course, the level of employees' personal involvement in the projects. Five projects per season are selected by employee vote and one "best pick" per season receives an additional EUR 5,000 award. This year, over 9,000 employees took part in the vote. 57% of projects involved community outreach (28% for poverty-related initiatives and 29% for education and integration), 37% involved healthcare and disability and 6% environmental protection. The allocation of funds is contained in the notice calling the next Annual General Meeting.

NOTICES OF MEETING

BNP Paribas will hold its next Shareholders' Combined General Meeting on 19 May 2020[1].

The meeting notices and invitations are available on the invest.bnpparibas.com website in French and English from the time of their publication in the French Bulletin of Compulsory Legal Announcements (BALO). Shareholders are also notified by announcements in the daily, investor and financial press. Staffs at all BNP Paribas branches are specifically trained to provide the necessary assistance and carry out the required formalities.

Holders of registered shares are automatically notified, regardless of the number of shares held, with a complete notice of meeting containing in particular the agenda, the draft resolutions and a voting form. Having given their prior agreement, a significant proportion (14.9%) of holders of registered shares were sent notification via the internet.

BNP Paribas informs holders of bearer shares via the internet regardless of the number of shares held, provided solely that their custodians are part of the market system known as Votaccess. Shareholders notified of the Annual General Meeting may take part quickly and easily. The Bank also provides custodians with notices of meetings and printed postal voting forms, which can then be sent to those shareholders who request them.

ATTENDANCE AT MEETINGS

Holders of shares may gain admittance to a General Meeting provided these shares have been recorded in their accounts for at least two trading days. Holders of bearer shares must also present an entry card or certificate proving their ownership of the shares.

VOTING

Using the internet voting platform gives shareholders access to the notice of the Annual General Meeting. They can then either vote or appoint a proxy, or print their admission card if they wish to attend in person.

Nearly 74% of all shareholders taking part in the vote in 2019 used the platform provided.

Shareholders not using the online platform returned the printed form enclosed with the notice of meeting to BNP Paribas. Before the Annual General Meeting, this document may be used:

- to request an admission card;
- to vote by post;
- to give proxy to another individual or legal entity;
- to give proxy to the Chairman of the Meeting.

Since 1998, the shareholders present at General Meetings have cast votes using an electronic box.

DISCLOSURE THRESHOLDS

In addition to the legal thresholds, and in accordance with article 5 of the Articles of association, any shareholder, whether acting alone or in concert, who owns or may hold directly or indirectly at least 0.5% of the capital or voting rights of BNP Paribas, or any multiple of that percentage up to 5%, is required to notify BNP Paribas by registered letter with return receipt.

Once the 5% threshold is reached, shareholders are required to disclose any increase in their interest representing a multiple of 1% of the capital or voting rights of BNP Paribas.

The disclosures described in the previous two paragraphs shall also apply when the shareholding falls below the above-mentioned thresholds.

In the case of failure to comply with these disclosure requirements, either legal or statutory, the undisclosed shares will be stripped of voting rights at the request of one or more shareholders who hold a combined interest of at least 2% of the capital or voting rights of BNP Paribas.

(1) Subject to change at a later date.

2 CORPORATE GOVERNANCE AND INTERNAL CONTROL

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2.1 Corporate governance report

This corporate governance report was prepared by the Board of directors in accordance with the last paragraph of article L.225-37 of the French Commercial Code.

The information contained herein notably takes into account annex I of the Commission delegated Regulated (EU) 2019/980 of 14 March 2019, AMF Recommendation No. 2012-02[1] amended on 3 December 2019, the AMF's 2019 report[2] and the December 2019 Annual Report of the High Committee for Corporate Governance (*Haut Comité de Gouvernement d'Entreprise* – HCGE).

(1) AMF recommendation No. 2012-02 – Corporate governance and executive compensation in companies referring to the Afep-Medef Code – Consolidated presentation of the recommendations contained in the Annual Reports of the AMF.

(2) 2019 AMF report on Corporate governance and executive compensation (December 2019).

2.1.1 PRESENTATION OF CORPORATE OFFICERS

MEMBERSHIP OF THE BOARD OF DIRECTORS AT 31 DECEMBER 2019

Jean LEMIERRE
Principal function: Chairman of the Board of directors of BNP Paribas

Date of birth: 6 June 1950
Nationality: French
Term start and end dates: 23 May 2017 – 2020 AGM
Date first elected to the Board of directors: 1 December 2014, ratified by the Annual General Meeting of 13 May 2015

Number of BNP Paribas shares held[(1)]*:* 30,826
Office address: 3, rue d'Antin
75002 PARIS,
FRANCE

Education
Graduate of the Institut d'Études Politiques de Paris.
Graduate of the École Nationale d'Administration.
Law Degree

Offices[(1)] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas[(*)], Chairman of the Board of directors
TEB Holding AS (Turkey), director
Other offices[(1)] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Total SA[(*)], director
Participation[(1)] in specialised committees of French or foreign companies
Total SA, member of the Corporate Governance and Ethics Committee and member of the Strategy & CSR Committee
Other[(1)]
Centre for Prospective Studies and International Information (CEPII), Chairman
Paris Europlace, Vice-Chairman
Association française des entreprises privées, member
Institute of International Finance (IIF), member
Orange International Advisory Board, member
International Advisory Council of China Development Bank (CDB), member
International Advisory Council of China Investment Corporation (CIC), member
International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS), member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Chairman of the Board of directors: BNP Paribas **Director:** TEB Holding AS (Turkey), Total SA **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), Orange International Advisory Board, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)	**Chairman of the Board of directors:** BNP Paribas **Director:** TEB Holding AS (Turkey), Total SA **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), Orange International Advisory Board, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)	**Chairman of the Board of directors:** BNP Paribas **Director:** TEB Holding AS (Turkey), Total SA **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), Orange International Advisory Board, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)	**Chairman of the Board of directors:** BNP Paribas **Director:** TEB Holding AS (Turkey) **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), Orange International Advisory Board, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC)

(1) At 31 December 2019.
(*) Listed company.

Jean-Laurent BONNAFÉ
Principal function: Director and Chief Executive Officer of BNP Paribas

Date of birth: 14 July 1961
Nationality: French
Term start and end dates: 23 May 2019 – 2022 AGM
Date first elected to the Board: 12 May 2010

Number of BNP Paribas shares held(1)*:* 94,153(2)
Office address: 3, rue d'Antin
75002 PARIS,
FRANCE

Education
Graduate of the École Polytechnique
Graduate of the École des Mines

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), Director and Chief Executive Officer

Other offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Carrefour(*), director
Pierre Fabre SA, director

Participation(1) in specialised committees of French or foreign companies
Pierre Fabre SA, member of the Strategic Committee

Other(1)
Association pour le Rayonnement de l'Opéra de Paris, Chairman
Entreprise pour l'Environnement, Chairman
Fédération Bancaire Française, member of the Executive Committee
La France s'engage, director

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Director and Chief Executive Officer: BNP Paribas **Chairman:** Association pour le Rayonnement de l'Opéra de Paris **Vice-Chairman:** Entreprise pour l'Environnement **Director:** Carrefour **Member of the Executive Committee:** Fédération Bancaire Française	**Director and Chief Executive Officer:** BNP Paribas **Chairman:** Fédération Bancaire Française, Association pour le Rayonnement de l'Opéra de Paris **Vice-Chairman:** Entreprise pour l'Environnement **Director:** Carrefour	**Director and Chief Executive Officer:** BNP Paribas **Director:** Carrefour	**Director and Chief Executive Officer:** BNP Paribas **Director:** Carrefour, BNP Paribas Fortis (Belgium)

(1) At 31 December 2019.
(2) Includes 25,228 BNP Paribas shares held as units in the shareholders' fund under the Company Savings Plan.
(*) Listed company.

Jacques ASCHENBROICH
Principal function: Chairman and Chief Executive Officer of the Valeo Group

Date of birth: 3 June 1954
Nationality: French
Term start and end dates: 23 May 2017 – 2020 AGM
Date first elected to the Board: 23 May 2017

Number of BNP Paribas shares held(1)*:* 1,000(**)
Office address: 43, rue Bayen
75017 PARIS,
FRANCE

Education
Graduate of the École des Mines
Corps des Mines

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director

Offices(1) held under the principal function
Valeo Group(*), Chairman and Chief Executive Officer

Other offices(1) held in listed or unlisted companies outside the BNPP Group, in France or abroad
Veolia Environnement(*), director

Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Financial Statements Committee
Veolia Environnement, member of the Audit Committee and Chairman of the Research, Innovation and Sustainable Development Committee

Other(1)
École Nationale Supérieure Mines ParisTech, Chairman
Club d'affaires Franco-Japonais, Co-Chairman
Association française des entreprises privées, Member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	
Chairman and Chief Executive Officer: Valeo Group **Director:** BNP Paribas Veolia Environnement **Chairman:** École Nationale Supérieure Mines ParisTech **Co-Chairman:** Club d'affaires Franco-Japonais	**Chairman and Chief Executive Officer:** Valeo Group **Director:** BNP Paribas Veolia Environnement **Chairman:** École Nationale Supérieure Mines ParisTech **Co-Chairman:** Club d'affaires Franco-Japonais	**Chairman and Chief Executive Officer:** Valeo Group **Director:** BNP Paribas Veolia Environnement **Chairman:** École Nationale Supérieure Mines ParisTech **Co-Chairman:** Club d'affaires Franco-Japonais	

(1) At 31 December 2019.
(*) Listed company.
(**) At 31 December 2019, and as a correction 1,000 at 31 December 2018.

Pierre André de CHALENDAR
Principal function: Chairman and Chief Executive Officer of Compagnie de Saint-Gobain

Date of birth: 12 April 1958
Nationality: French
Term start and end dates: 24 May 2018 – 2021 AGM
Date first elected to the Board: 23 May 2012

Number of BNP Paribas shares held(1)*:* 5,000
Office address: Les Miroirs
92096 LA DÉFENSE CEDEX,
FRANCE

Education
Graduate of École Supérieure des Sciences Économiques et Commerciales (ESSEC)
Graduate of the École Nationale d'Administration

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director

Offices(1) held under the principal function
Compagnie de Saint-Gobain(*), Chairman and Chief Executive Officer
GIE SGPM Recherches, director
Saint-Gobain Corporation, director

Participation(1) in specialised committees of French or foreign companies
BNP Paribas, Chairman of the Remuneration Committee and member of the Corporate Governance, Ethics, Nominations and CSR Committee
Compagnie de Saint-Gobain, member of the Strategic Committee

Other:
Essec Supervisory Board, Chairman
La Fabrique de l'Industrie, Co-Chairman
Association française des entreprises privées, Member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Chairman and Chief Executive Officer: Compagnie de Saint-Gobain **Director:** BNP Paribas	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas

(1) At 31 December 2019.
(*) Listed company.

2

Monique COHEN
Principal function: Partner of Apax Partners

Date of birth: 28 January 1956 *Nationality:* French *Term start and end dates:* 23 May 2017 – 2020 AGM *Date first elected to the Board:* 12 February 2014, ratified by the Annual General Meeting of 14 May 2014 *Number of BNP Paribas shares held*[(1)]*:* 9,620 *Office address:* 1, rue Paul-Cézanne 75008 PARIS, FRANCE **Education** Graduate of the École Polytechnique Master's Degree in Mathematics Master's Degree in Business Law	**Offices[(1)] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad** BNP Paribas[(*)], director **Offices[(1)] held under the principal function** Apax Partners SAS, director Proxima Investissement SA (Luxembourg), Chairwoman of the Board Fides Holdings, Chairwoman of the Board of directors Fides Acquisitions, director **Other offices[(1)] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad** Hermès[(*)], Vice-Chairwoman of the Supervisory Board Safran[(*)], senior director **Participation[(1)] in specialised committees of French or foreign companies** BNP Paribas, Chairwoman of the Corporate Governance, Ethics, Nominations and CSR Committee, member of the Internal Control, Risk and Compliance Committee Hermès, Chairwoman of the Audit and Risks Committee Safran, Chairwoman of the Nominations and Remuneration Committee

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Chairwoman of the Board of directors: Proxima Investissement SA (Luxembourg), Fides Holdings **Vice-Chairwoman of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners SAS **Member:** Fides Acquisitions	**Chairwoman of the Board of directors:** Proxima Investments SA (Luxembourg), Fides Holdings, Fides Acquisitions **Vice-Chairwoman of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners SAS	**Chairwoman of the Board of directors:** Proxima Investment SA (Luxembourg) **Vice-Chairwoman and member of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners Midmarket SAS **Member:** Special Committee (advisory body) of Global Project SAS, Supervisory Board of JC Decaux	**Chairwoman of the Board of directors:** Proxima Investment SA (Luxembourg) **Vice-Chairwoman and member of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners Midmarket SAS **Member:** Special Committee (advisory body) of Global Project SAS, Supervisory Board of JC Decaux

(1) At 31 December 2019.
(*) Listed company.

Wouter DE PLOEY
Principal function: Chief Executive Officer of ZNA (hospital group in Antwerp, Belgium)

Date of birth: 5 April 1965
Nationality: Belgian
Term start and end dates: 23 May 2019 – 2022 AGM
Date first elected to the Board: 26 May 2016

Number of BNP Paribas shares held[(1)]*:* 1,000
Office address: Leopoldstraat 26
B-2000 ANTWERPEN/ANVERS,
BELGIUM

Education
Master's degree and Doctorate in Economics from the University of Michigan, Ann Arbor (United States of America)
Master's in Economics (Magna cum Laude) and Philosophy, University of Leuven (Belgium)

Offices[(1)] **held in listed or unlisted companies of the BNP Paribas Group, in France or abroad**
BNP Paribas[(*)], director
Offices[(1)] **held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad**
Vanbreda Risk & Benefits NV, director
Unibreda NV, director
Participation[(1)] **in specialised committees of French or foreign companies**
BNP Paribas, member of the Financial Statements Committee
Other[(1)]
Gasthuiszusters Antwerpen, director
Regroupement GZA-ZNA, director
BlueHealth Innovation Center, director
Chamber of Commerce bureau, VOKA Antwerp - Waasland (Belgium), Vice-Chairman

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:
Director: BNP Paribas, Vanbreda Risk & Benefits NV (Belgium), Unibreda NV (Belgium), BlueHealth Innovation Center, Gasthuiszusters Antwerpen, Regroupement GZA-ZNA **Vice-Chairman:** Chamber of Commerce bureau, VOKA Antwerp - Waasland (Belgium)	**Director:** BNP Paribas Vanbreda Risk & Benefits NV (Belgium), Unibreda NV **Vice-Chairman:** Chamber of Commerce bureau, VOKA Antwerp - Waasland (Belgium) **Member:** Belgian - American Educational Foundation (Belgium) **Adviser to the Board of directors:** Lannoo publishing company (Belgium)	**Member of the Supervisory Board:** GIMV XL **Director:** BNP Paribas **Vice-Chairman:** Waasland (Belgium) **Chairman:** Board of directors of the Museum of Contemporary Art, Antwerp (Belgium) **Member:** Belgian - American Educational Foundation (Belgium), of the Board of directors of Haute École Odisee (Belgium) **Adviser to the Board of directors:** Lannoo publishing company (Belgium)

(1) At 31 December 2019.
(*) Listed company.

Hugues EPAILLARD
Principal function: Real estate business manager

Date of birth: 22 June 1966
Nationality: French
Term start and end dates: elected by BNP Paribas executives employees for three years from 16 February 2018 - 15 February 2021
Date first elected to the Board: 16 February 2018

Number of BNP Paribas shares held[1]*:* 373[2]
Office address: 83, La Canebière
13001 MARSEILLE

Participation[1] in specialised committees of French or foreign companies
BNP Paribas, member of the Internal Control, Risk and Compliance Committee and of the Remuneration Committee

Other[1]
Judge at the Marseille Employment Tribunal, Management section
Commission Paritaire de la Banque (AFB – Recourse Commission), member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:
Director: BNP Paribas

(1) *At 31 December 2019.*
(2) *Includes 363 BNP Paribas shares held under the Company Savings Plan.*
(*) *Listed company.*

Rajna GIBSON-BRANDON
Principal function: Professor in Finance at the University of Geneva

Date of birth: 20 December 1962
Nationality: Swiss
Term start and end dates: 28 November 2018 – 2021 AGM
Date first elected to the Board: 28 November 2018

Number of BNP Paribas shares held[1]*:* 1,000
Office address: 40, Boulevard Pont d'Arve
CH-1211 GENEVA 4
Switzerland

Education
Doctorate in Social Sciences & Economics (Specialising in Finance), University of Geneva

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director

Participation[1] in specialised committees of French or foreign companies
BNP Paribas, member of the Internal Control, Risk and Compliance Committee

Other[1]
Geneva Finance Research Institute, Deputy director
Geneva Institute for Wealth Management Foundation, director
Bülach Investment Professionals' Scientific and Training Board, Chairwoman
Strategic Committee and Sustainable Finance Supervisory Committee in Geneva, member
Applic8 SA, director

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:
Director: BNP Paribas, Applic8 SA
Chairwoman: Bülach Investment Professionals' Scientific and Training Board
Director: Geneva Institute for Wealth Management Foundation
Deputy director: Geneva Finance Research Institute
Member: Strategic Committee and Sustainable Finance Supervisory Committee in Geneva

(1) *At 31 December 2019.*
(*) *Listed company.*

Marion GUILLOU
Principal function: Independent director

Date of birth: 17 September 1954
Nationality: French
Term start and end dates: 23 May 2019 – 2022 AGM
Date first elected to the Board: 15 May 2013

Number of BNP Paribas shares held(1)*:* 1,000
Office address: 1, place du Palais-Royal
75001 PARIS,
FRANCE

Education
Graduate of the École Polytechnique (X73)
Graduate of the École Nationale du Génie Rural, des Eaux et des Forêts
Doctor of Food Sciences
Institut français des administrateurs

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director

Other offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Imerys(*), director
Veolia Environnement(*), director

Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Corporate Governance, Ethics, Nominations and CSR Committee, and of the Internal Control, Risk and Compliance Committee
Imerys, member of the Nominations and Remuneration Committee
Veolia Environnement, member of the Research, Innovation and Sustainable Development Committee and the Remuneration Committee

Other(1)
Special Counsellor, French State Council
Care - France (NGO), director
International agricultural research centre (IARC), director
Bioversity International, director
Bioversity-CIAT Alliance, director
IFRI, director
Universcience, director

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Chairwoman of the Board of directors: IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Imerys, Veolia Environnement **Member:** Board of directors of Universcience, Board of directors of Care - France (NGO), Board of directors of Bioversity International, Board of directors of the International agricultural research centre (IARC), Board of directors of IFRI	**Chairwoman of the Board of directors:** IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Imerys, Veolia Environnement **Member:** Board of directors of Universcience, Board of directors of Care - France (NGO), Board of directors of IHEST (Institut des Hautes Études en Sciences et Technologies), Academic Council of the Academy of Technologies, Board of directors of Bioversity International	**Chairwoman of the Board of directors:** IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Apave, CGIAR, Imerys, Veolia Environnement **Member:** Board of directors of Care - France (NGO), Board of directors of IHEST (Institut des Hautes Études en Sciences et Technologies), Board of directors of Bioversity International	**Chairwoman of the Board of directors:** IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Apave, CGIAR, Imerys, Veolia Environnement **Member:** Board of directors of Fondation Nationale des Sciences Politiques (FNSP)

(1) At 31 December 2019.
(*) Listed company.

Denis KESSLER
Principal function: Chairman and Chief Executive Officer of SCOR SE

Date of birth: 25 March 1952
Nationality: French
Term start and end dates: 24 May 2018 – 2021 AGM
Date first elected to the Board: 23 May 2000

Number of BNP Paribas shares held[(1)]*:* 2,684
Office address: 5, avenue Kléber
75016 PARIS,
FRANCE

Education
Degree in Economic Science
Degree in Social Science
Doctor of Economic Science
Graduate of the French École des Hautes Études Commerciales
French Institute of Actuaries, qualified member

Offices[(1)] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas[(*)], director
Offices[(1)] held under the principal function
SCOR SE[(*)], Chairman and Chief Executive Officer
Other offices[(1)] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Invesco Ltd[(*)] (United States), director
Participation[(1)] in specialised committees of French or foreign companies
BNP Paribas, Chairman of the Financial Statements Committee
Invesco Ltd, Member of the Compensation Committee and the Nominations and Corporate Governance Committee
SCOR SE, Chairman of the Strategic Committee and member of the Crisis Management Committee
Other[(1)]
Association de Genève, director
Global Reinsurance Forum - Reinsurance Advisory Board, member
Institut des Sciences morales et politiques, member of the French Institute of Actuaries, qualified member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Chairman and Chief Executive Officer: SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member:** Board of directors of Association de Genève, Global Reinsurance Forum - Reinsurance Advisory Board, Institut des sciences morales et politiques, Institute of Actuaries	**Chairman and Chief Executive Officer:** SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member:** Board of directors of Association de Genève, Global Reinsurance Forum - Reinsurance Advisory Board, Conference Board (Global counsellor), Institut des sciences morales et politiques, Institute of Actuaries	**Chairman and Chief Executive Officer:** SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member:** Board of directors of Association de Genève, Global Reinsurance Forum - Reinsurance Advisory Board, Conference Board (Global counsellor)	**Chairman and Chief Executive Officer:** SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member:** Board of directors of the Association de Genève, Bureau of the French insurance companies federation (Fédération Française des Sociétés d'Assurance), Global Reinsurance Forum - Reinsurance Advisory Board, Conference Board (Global counsellor)

(1) At 31 December 2019.
(*) Listed company.

Daniela SCHWARZER
Principal function: Director of think tank, DGAP (Deutsche Gesellschaft für Auswärtige Politik) (German Council on Foreign Relations)

Date of birth: 19 July 1973
Nationality: German
Term start and end dates: 23 May 2017 – 2020 AGM
Date first elected to the Board: 14 May 2014

Number of BNP Paribas shares held(1)*:* 1,000
Office address: Rauchstrasse 17-18
10787 BERLIN,
GERMANY

Education
Doctorate in Economics from the Free University of Berlin
Master's degree in Political Science and in Linguistics from the University of Tübingen

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director

Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Corporate Governance, Ethics, Nominations and CSR Committee

Other
Jacques-Delors Institute, director
Foundation United Europe (Germany), director
Open Society Foundation, member of the Advisory Committee
Académie fédérale de sécurité, member of the Advisory Committee

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Director: BNP Paribas **Member:** Board of directors of the Jacques-Delors Institute, Board of directors of United Europe (Germany), Open Society Foundation, Advisory Committee **Research** Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)	**Director:** BNP Paribas **Member:** Board of directors of Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany) **Research** Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)	**Director:** BNP Paribas **Member:** Board of directors of Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany) **Research** Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)	**Director:** BNP Paribas **Member:** Board of directors of Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany) **Research** Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)

(1) At 31 December 2019.
(*) Listed company.

Michel TILMANT
Principal function: Director of companies

Date of birth: 21 July 1952
Nationality: Belgian
Term start and end dates: 23 May 2019 – 2022 AGM
Date first elected to the Board: 12 May 2010
(Michel Tilmant served as non-voting director (*censeur*) of BNP Paribas from 4 November 2009 to 11 May 2010)

Number of BNP Paribas shares held[(1)]*:* 1,000
Office address: Rue du Moulin 10
B-1310 LA HULPE,
BELGIUM

Education
Graduate of the University of Louvain

Offices[(1)] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas[(*)], director

Offices[(1)] held under the principal function
Strafin sprl (Belgium), manager

Other offices[(1)] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Sofina SA[(*)] (Belgium), director
Groupe Lhoist SA (Belgium), director
Foyer Group:
CapitalatWork Foyer Group SA (Luxembourg), Chairman
Foyer SA (Luxembourg), director
Foyer Finance SA, director

Participation[(1)] in specialised committees of French or foreign companies
BNP Paribas, Chairman of the Internal Control, Risk and Compliance Committee
Sofina SA, member of the Nominations and Remuneration Committee
Groupe Lhoist SA, member of the Audit Committee

Other[(1)]
Cinven Ltd (United Kingdom), senior adviser
Royal Automobile Club of Belgium (Belgium), director
Zoute Automobile Club (Belgium), director
Université Catholique de Louvain (Belgium), director

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Chairman: CapitalatWork Foyer Group SA (Luxembourg) **Director:** BNP Paribas Foyer SA (Luxembourg), Foyer Finance SA, Groupe Lhoist SA (Belgium), Sofina SA (Belgium) **Manager:** Strafin sprl (Belgium) **Member:** Board of directors of Royal Automobile Club of Belgium (Belgium), Board of Directors of Université Catholique de Louvain (Belgium) **Senior adviser:** Cinven Ltd (United Kingdom)	**Chairman:** CapitalatWork Foyer Group SA (Luxembourg) **Director:** BNP Paribas Foyer SA (Luxembourg), Foyer Finance SA, Groupe Lhoist SA (Belgium), Sofina SA (Belgium) **Manager:** Strafin sprl (Belgium) **Member:** Board of directors of Royal Automobile Club of Belgium (Belgium), Board of Directors of Université Catholique de Louvain (Belgium) **Senior adviser:** Cinven Ltd (United Kingdom)	**Director:** BNP Paribas CapitalatWork Foyer Group SA (Luxembourg), Foyer SA (Luxembourg), Groupe Lhoist SA (Belgium), Sofina SA (Belgium) **Manager:** Strafin sprl (Belgium) **Member:** Board of directors of Royal Automobile Club of Belgium (Belgium), Board of Directors of Université Catholique de Louvain (Belgium) **Senior adviser:** Cinven Ltd (United Kingdom)	**Director:** BNP Paribas CapitalatWork Foyer Group SA (Luxembourg), Foyer SA (Luxembourg), Groupe Lhoist SA (Belgium), Sofina SA (Belgium) **Manager:** Strafin sprl (Belgium) **Member:** Board of directors of Royal Automobile Club of Belgium (Belgium), Board of Directors of Université Catholique de Louvain (Belgium) **Senior adviser:** Cinven Ltd (United Kingdom)

(1) At 31 December 2019.
(*) Listed company.

Sandrine VERRIER
Principal function: Production and sales support assistant

Date of birth: 9 April 1979
Nationality: French
Term start and end dates: elected by BNP Paribas technician employees for three years from 16 February 2018 - 15 February 2021
Date first elected to the Board: 16 February 2015

Number of BNP Paribas shares held(1)*:* 10
Office address: 22, rue de Clignancourt
75018 PARIS,
FRANCE

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director
Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Financial Statements Committee
Other(1)
Ile de France Economic, Social and Environmental Council, Member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Director: BNP Paribas	**Director:** BNP Paribas	**Director:** BNP Paribas	**Director:** BNP Paribas

(1) At 31 December 2019.
(*) Listed company.

Fields WICKER-MIURIN
Principal function: Director of companies

Date of birth: 30 July 1958
Nationalities: British and American
Term start and end dates: 23 May 2017 – 2020 AGM
Date first elected to the Board: 11 May 2011

Number of BNP Paribas shares held(1)*:* 1,000
Office address: 11-13 Worple Way
RICHMOND-UPON-THAMES,
SURREY TW10 6DG,
UNITED KINGDOM

Education
Graduate of the Institut d'Études Politiques de Paris
Master's Degree from the School of Advanced International Studies, Johns Hopkins University
BA, University of Virginia

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director
Offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Prudential Plc(*), director
SCOR SE(*), director
Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Financial Statements Committee and of the Remuneration Committee
Prudential Plc, member of the Compensation Committee
SCOR SE, member of the Strategic Committee, Risk Committee, Nominations and Remuneration Committee and Audit Committee, member of the Crisis Management Committee and Chairwoman of the CSR Committee
Other(1)
Co-founder and Partner at Leaders' Quest (United Kingdom)
UK Department of Digital Culture, Media and Sports, independent member of the Ministry Council, and Chairwoman of the Audit and Risk Committee

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Director: BNP Paribas, Prudential Plc, SCOR SE **Co-founder and Partner** at Leaders' Quest (United Kingdom) **Independent member of the Ministry Council and Chairwoman of the Audit and Risks Committee:** UK Department of Digital Culture, Media and Sports	**Director:** BNP Paribas, Control Risks Group, SCOR SE **Independent member of the Ministry Council and Chairwoman of the Audit and Risks Committee:** UK Department of Digital Culture, Media and Sports	**Director:** BNP Paribas, Control Risks Group, SCOR SE **Independent member and Chairwoman of the Audit and Risk Committee:** UK Department of Digital Culture, Media and Sports	**Director:** BNP Paribas, Bilt Paper BV (Netherlands), SCOR SE **Member:** Board of the Batten School of Leadership – University of Virginia (United States)

(1) At 31 December 2019.
(*) Listed company.

SCHEDULE OF THE TERMS OF THE DIRECTORSHIPS OF COMPANY DIRECTORS

On the Board's proposal, the Shareholders' Annual General Meeting of 23 May 2000 decided to limit the term of office of new directors to three years.

Directors	2020 (AGM called to approve the 2019 financial statements)	2021 (AGM called to approve the 2020 financial statements)	2022 (AGM called to approve the 2021 financial statements)
J. Lemierre	✓		
J-L. Bonnafé			✓
J. Aschenbroich	✓		
P.A. de Chalendar		✓	
M. Cohen	✓		
W. De Ploey			✓
H. Epaillard		✓(i)	
R. Gibson-Brandon		✓(ii)	
M. Guillou			✓
D. Kessler		✓	
D. Schwarzer	✓		
M. Tilmant			✓
S. Verrier		✓(iii)	
F. Wicker-Miurin	✓		

(i) Director elected by executive employees in the first round of voting on 21 November 2017 (took office on 16 February 2018).

(ii) Director whose term of directorship was ratified by the Annual General Meeting of 23 May 2019, appointed to replace Laurence Parisot. Her term will run for the remainder of Mrs Laurence Parisot's term of directorship.

(iii) Director elected by technician employees, start and end of term of previous term of office: 16 February 2015 – 15 February 2018. Re-elected by technician employees in the second round of voting on 12 December 2017 (took office on 16 February 2018).

OTHER CORPORATE OFFICER

Philippe BORDENAVE
Principal function: Chief Operating Officer of BNP Paribas

Date of birth: 2 August 1954
Nationality: French
Number of BNP Paribas shares held[1]*:* 76,574
Office address: 3, rue d'Antin
75002 PARIS,
FRANCE

Education
Graduate of the École Polytechnique
Graduate of the École Nationale d'Administration
DEA in Economics

Offices[1] held under the principal function
BNP Paribas[*], Chief Operating Officer
Verner Investissements, director
Exane BNP Paribas, non-voting director (censeur)
Other[1]
Grancher Foundation, director

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:	2017:	2016:	2015:
Chief Operating Officer: BNP Paribas **Director:** Verner Investissements **Non-voting director (*censeur*):** Exane BNP Paribas	**Chief Operating Officer:** BNP Paribas **Director:** Verner Investissements **Non-voting director (*censeur*):** Exane BNP Paribas	**Chief Operating Officer:** BNP Paribas **Director:** Verner Investissements **Non-voting director (*censeur*):** Exane BNP Paribas	**Chief Operating Officer:** BNP Paribas **Director:** Verner Investissements **Non-voting director (*censeur*):** Exane BNP Paribas

(1) At 31 December 2019.
(*) Listed company.

NON-VOTING DIRECTOR

Christian NOYER
Principal function: Honorary Governor of Banque de France

Date of birth: 6 October 1950
Nationality: French
Start date: 1 May 2019
Office address: 9, rue de Valois
75001 PARIS,
FRANCE

Education
Ecole Nationale d'Administration
Graduate of the Institut des sciences politiques
Masters in Law, University of Paris
Law degree, University of Rennes

Offices[1] held in listed or unlisted companies, in France or abroad
Power Corporation Canada[*], director
NSIA Banque Côte d'Ivoire, director
Lloyd's of London, director
Lloyd's Insurance Company SA, director
Setl Ltd, director

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2018:
Director: Power Corporation Canada,
NSIA Banque Côte d'Ivoire,
Lloyd's of London

(1) At 31 December 2019.
(*) Listed company.

2.1.2 CORPORATE GOVERNANCE AT BNP PARIBAS

The Corporate Governance Code that BNP Paribas referred to on a voluntary basis in this report is the Corporate Governance Code for Listed Companies, published by the French employers' organisations, *Association Française des Entreprises Privées* (Afep) and the *Mouvement des Entreprises de France* (Medef). BNP Paribas applies the recommendations of this Code, hereinafter referred to as the Corporate Governance Code or Afep-Medef Code, which can be viewed on the BNP Paribas website (http://invest.bnpparibas.com), the Afep website (http://www.afep.com) and the Medef website (http://www.medef.com).

The detailled rules on the participation of shareholders at the Shareholders' Annual General Meeting are laid out in article 18, Title V "Shareholders' Meetings", of BNP Paribas' Articles of association published in the Universal registration document in the section Founding Documents and Articles of association. Moreover, a summary of these rules and a report on the organisation and running of the Shareholders' Annual General Meeting of 23 May 2019 are provided in the "BNP Paribas and its shareholders" section of said document.

In addition to the above, BNP Paribas is governed in accordance with French and European banking regulations, and the guidelines issued by the European Banking Authority (EBA) and is subject to permanent supervision of the European Central Bank (ECB) pursuant to the Single Supervisory Mechanism (SSM).

1. PRINCIPLES OF GOVERNANCE

The Internal rules adopted by the Board of directors define the duties of the Board and of its specialised committees. They are updated periodically to comply with current laws, regulations and market guidelines, and to keep pace with best practice in the area of corporate governance.

The Internal rules were extensively revised in 2015 to reflect the provisions of Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (hereinafter the "CRD 4"), then amended in October 2016 with, in particular, the development of three procedures applicable to non executive directors (number of directorships; conflicts of interest; identification, selection and succession of directors). In 2018, the Internal rules were revised once again and the three existing procedures were replaced by a Suitability policy for Members of the management body and Key function holders, hereinafter "Suitability policy". The proposed amendments comply with the Afep-Medef Code, revised in June 2018, the EBA Guidelines on both internal governance and the assessment of the suitability of members of the management body and key function holders (the "Fit and Proper Guidelines") published on 26 September 2017 and applicable from 30 June 2018 and the Ordinance No. 2017-1162 of 12 July 2017. These documents were updated only for provisions not subject to voting at the Annual General Meeting, to harmonize them with the Pacte law of 22 May 2019, and, as such, are included in this report.

A Group Code of conduct, approved by the Board of directors, was introduced in 2016.

Code of conduct (article 1.2 of the Internal rules)

The Board of directors and Executive Management of BNP Paribas share the conviction that the success of the Bank depends on the behaviour of each employee. "[The Code of conduct] sets out the rules to uphold our values and perform the Bank's missions. This Code, which shall be integrated by each business line and each employee, governs the actions of each employee, and guides the decisions at every level of the organisation. For this purpose, the Board ensures the Executive Management implements this Code into business lines, countries and regions."

Note that the Internal rules emphasise the collegial nature of the Board of directors, which jointly represents all shareholders and must act in the Company's best interest at all times. It details the Board responsibilities (article 1).

The Board of directors is backed by four specialised committees (the Financial Statements Committee, the Internal Control, Risk and Compliance Committee, the Corporate Governance, Ethics, Nominations and CSR Committee, the Remuneration Committee) as well as any *ad hoc* committees. The Internal rules detail each committee's missions, in line with the provisions of the CRD 4 and EBA Guidelines. They provide for joint meetings between the Financial Statements Committee and the Internal Control, Risk and Compliance Committee whenever required.

Neither the members of the Executive Management nor the Chairman of the Board of directors have sat on any Committee since 1997.

As far as the Board is aware, no agreement has been entered into directly, or through an intermediary, between on the one hand, one of BNP Paribas' corporate officers and, on the other, another company in which BNP Paribas owns, directly or indirectly, over half the share capital (article L.225-37-4 paragraph two of the French Commercial Code), without prejudice to any agreements relating to current operations concluded under normal conditions.

The Internal rules and Suitability policy mentioned above have been adopted by the Board of directors and are included in this report.

The Board of directors (on 31 December 2019)
Chairman: Jean Lemierre

Missions and controls in the following areas:

- Guidelines and strategic operations;
- CSR promotion;
- Governance, Internal Control and financial statements;
- Supervision of risk management;
- Financial communication;
- Remuneration;
- Preventive recovery plan;
- Monitoring the application of the Code of conduct.

Financial Statements Committee (CdC)

Members

Denis Kessler (C) (i)
Jacques Aschenbroich (i)
Wouter De Ploey (i)
Sandrine Verrier (ii)
Fields Wicker-Miurin (i)

Missions

- Monitoring the preparation of the financial information
- Monitoring the efficiency of the Internal Control systems and of risk management systems regarding accounting and financial matters
- Monitoring the statutory auditing of the annual financial statements and of the consolidated financial statements by the Statutory Auditors as well as the independence of the Statutory Auditors

Internal Control, Risk Management and Compliance Committee (CCIRC)

Members

Michel Tilmant (C) (i)
Monique Cohen (i)
Hugues Epaillard (ii)
Rajna Gibson-Brandon (i)
Marion Guillou (i)

Missions

- Reviewing the global strategy concerning risks
- Monitoring the remuneration principles in relation to risks
- Reviewing issues relating to Internal Control and compliance
- Reviewing the prices of products and services in relation to the risk strategy

Corporate Governance, Ethics, Nominations and CSR Committee (CGEN)

Members

Monique Cohen (C) (i)
Pierre André de Chalendar (i)
Marion Guillou (i)
Daniela Schwarzer (i)

Missions

- Oversight and monitoring of the compliance of governance principles with changes in regulations and best practice in the area of corporate governance
- Identification of, selection of, and succession plan for directors and committee members
- Assessment of the Board of directors
- Periodic review of the selection of, appointment of and succession process for executive corporate officers
- Monitoring Executive Management's application of the Suitability policy for Key function holders under EBA guidelines
- Assessment of executive corporate officers
- Appraising the independence of the directors
- Maintaining the general balance of the Board of directors
- Regular monitoring of updates to the Code of conduct
- Monitoring CSR issues (Group's contribution to economic, sustainable and responsible development)

Remuneration Committee (CR)

Members

Pierre André de Chalendar (C) (i)
Hughes Epaillard (ii)
Fields Wicker-Miurin (i)

Missions

- Annual review of the principles that underpin the Group's remuneration policy
- Annual review of the remuneration, allowances and benefits in kind granted to the corporate officers of the Company and of the Group's major French subsidiaries
- Annual review of the remuneration of the Group's regulated staff categories
- Control of the remuneration of the Head of the Risk Management Function and Head of Compliance

Joint meetings of the CdC and the CCIRC
Chairman: Denis Kessler (i)

Missions

- Examining the mission plan of the General Inspection and the audit plan of the Statutory Auditors and preparing the work of the Board on the assessment of the risk policies and risk management measures
- Dealing with the common issues relating to the risk policies and their financial impacts

(C) Chairman.
(i) Independent director according to the provisions of the Afep-Medef Code.
(ii) Director elected by employees.

Each Committee is composed of members with expertise in the relevant areas and complies with the provisions of the French Monetary and Financial Code and the recommendations of the Afep-Medef Code. Thus,

- most of the members of the Financial Statements Committee have qualifications and experience in company's financial management, accounting and financial information. In consideration of his financial skills, reinforced by his position as Chief Executive Officer of SCOR, a major international reinsurance company, Denis Kessler was appointed Chairman of the Committee;
- most of the members of the Internal Control, Risk and Compliance Committee have specific expertise in financial matters and risk management, either through their training or experience. Its Chairman has international experience in banking management. One of its members has been a member of the Board of the *Autorité des Marchés Financiers* (AMF) and another has long-term financial risk experience;

- the members of the Corporate Governance, Ethics, Nominations and CSR Committee are independent directors who have expertise in corporate governance and in putting together management teams in international companies. Some deal with CSR issues professionally;
- the Remuneration Committee is made up of independent members who have experience of remuneration systems and market practices in this area and includes a director elected by employees. One member of the Remuneration Committee is also a member of the Internal Control, Risk and Compliance Committee. This composition is intended to facilitate the Board's work on the appropriateness of BNP Paribas' remuneration principles with the risk policy.

The Chairman of the Board of directors is not a member of any Committee, but may attend committee meetings and may add subjects he considers relevant to their agenda.

European and French regulations applicable to BNP Paribas require members of the Board of directors and executive officers to have integrity at all times, and to have the knowledge skills, experience and time needed to perform their duties. The ECB is notified of their appointment or re-appointment so that it can assess them on the basis of these criteria. To date, BNP Paribas has not received any notification from the ECB that these criteria have not been met.

In addition, the ECB did not issue any objections as regards the composition of the Board of directors or its specialised committees.

1.a Separation of the functions of Chairman and Chief Executive Officer

As of 11 June 2003, BNP Paribas has dissociated the offices of Chairman of the Board and Chief Executive Officer. This decision complies with the obligations imposed on credit institutions since 2014 by French law transposing the CRD 4.

The duties of the Chairman

They are described in article 3.1 of the Internal rules.

The Chairman is responsible for ensuring that the quality of the relationship with shareholders is maintained, coordinating closely with any steps taken by Executive Management in this area. In this connection, the Chairman chairs the Shareholders Liaison Committee, whose task is to assist the Bank in its communications with individual shareholders; several times a year, he invites the shareholders to meetings where the Company's strategy is explained. He reports on his duties to the Board of directors.

The Chairman is careful to maintain a close and trusting relationship with Executive Management and provides the team with assistance and advice while respecting its executive responsibilities. The Chairman organises his activities so as to ensure his availability and put his experience to the Group's service. His duties are contributory in nature and do not confer any executive power on him. They do not in any way restrict the powers of the Chief Executive Officer, who has sole operational responsibility for the Group.

Coordinating closely with Executive Management, the Chairman can represent the Group in its high-level relationships, particularly with major clients, public authorities and institutions, at national, European and international levels. He plays an active part in discussions concerning regulatory developments and public policies affecting BNP Paribas, and, more generally, the financial services sector.

The Chairman contributes to promoting the values and image of BNP Paribas, both within the Group and externally. He expresses his views on the principles of action governing BNP Paribas, in particular in the field of professional ethics. He contributes to enhancing the Group's image through the responsibilities he exercises personally in national or international public bodies.

At the request of the Chief Executive Officer, he can take part in any internal meeting on subjects relating to strategy, organisation, investment or disinvestment projects, risks and financial information. He expresses his opinions without prejudice to the remit of the Board of directors; he provides support to the teams responsible for covering major companies and international financial institutions; he also contributes to the development of BNP Paribas' advisory activities, particularly by assisting in the completion of major corporate finance transactions.

He ensures that principles of corporate governance are defined and implemented.

The Chairman is the custodian of the proper functioning of the Board of directors of BNP Paribas. As such:

- with the support of the Corporate governance, Ethics, Nominations and CSR Committee, with the approval of the Board of directors and of the Shareholders' Annual General Meeting, where appropriate, he endeavours to build an efficient and balanced Board, and to manage, both in the short- and long-term, the replacement and succession processes related to the Board of directors and nominations which will acknowledge the Company's strategic ambitions;
- on the basis of the dissociation of the functions of Chairman and Chief Executive Officer, his role is to ensure directors' independence and freedom of speech;
- he ensures that the directors have the documentation and information necessary to carry out their duties in a timely manner and in a clear and appropriate form.

The powers of the Chief Executive Officer

The Chief Executive Officer has the broadest powers to act in all circumstances on behalf of BNP Paribas, and to represent the Bank in its relation with third parties. He is responsible for the organisation of internal control procedures and for all the information required by regulations in that regard.

He exercises his powers within the limitations of the corporate object, and subject to any powers expressly attributed by law to the Shareholders' Annual General Meeting and Board of directors.

The Internal rules of the Board of directors provide that the Chief Executive Officer shall request its prior approval for all investment or disinvestment decisions (other than portfolio transactions) in excess of EUR 250 million, and for any proposal to acquire or dispose of shareholdings in excess of that threshold (other than portfolio transactions) (article 1.1). The Chief Executive Officer must also ask the Board's Financial Statements Committee for prior approval of any non-audit related assignment involving fees in an amount of over EUR 1 million (excluding taxes) (article 7.1.3).

1.b Membership of the Board – Independence of Directors

Membership of the Board of directors: a collegial body with collective competence

On the proposal of the Board of directors, the Shareholders' Annual General Meeting of 23 May 2019 reappointed Marion Guillou, Jean-Laurent Bonnafé, Wouter De Ploey and Michel Tilmant for a three-year term.

Following Laurence Parisot's resignation of her directorship on 25 September 2018, the Annual General Meeting of 23 May 2019 ratified the co-option of Rajna Gibson-Brandon.

At the end of the Annual General Meeting of 23 May 2019 and as of 31 December 2019:

Number of Board members	O/w elected Board members	Nationalities	Percentage of women	Independence
14	2	5	41.7%	> 50%

Independence of Directors (as of 31 December 2019)

The following table shows the position of each director with regard to the independence criteria contained in the Afep-Medef Code to define an independent director:

Criteria	Jean LEMIERRE	Jean-Laurent BONNAFÉ	Jacques ASCHENBROICH	Pierre André de CHALENDAR	Monique COHEN	Hugues EPAILLARD	Rajna GIBSON-BRANDON	Marion GUILLOU	Denis KESSLER	Daniela SCHWARZER	Michel TILMANT	Wouter DE PLOEY	Sandrine VERRIER	Fields WICKER-MIURIN
1 Not be, or have been, in the last five years (i) an employee or executive corporate officer of the Company or of a consolidated subsidiary of the Company; (ii) a director of a consolidated subsidiary	o	o	✓	✓	✓	o	✓	✓	✓	✓	✓	✓	o	✓
2 Whether or not corporate offices are held in another company	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3 Whether or not significant business relationships exist	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4 Whether or not there are close family ties to a corporate officer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5 Not an auditor of the Company within the previous five years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6 Not a director of the Company for more than 12 years	✓	✓	✓	✓	✓	✓	✓	✓	o(*)	✓	✓	✓	✓	✓
7 Major shareholder status	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ *represents compliance with an independence criterion defined in the Afep-Medef Code.*
o *represents non-compliance with an independence criterion defined in the Afep-Medef Code.*
(*) See below.

- The following directors meet the independence criteria contained in the Corporate Governance Code and reviewed by the Board of directors: Monique Cohen, Rajna Gibson-Brandon, Marion Guillou, Daniela Schwarzer, Fields Wicker-Miurin, Jacques Aschenbroich, Pierre André de Chalendar, Wouter De Ploey and Michel Tilmant.

  In particular, for Monique Cohen, Jacques Aschenbroich, Pierre André de Chalendar and Denis Kessler, the Board of directors confirmed that the business relations between BNP Paribas and respectively (i) Apax Partners, as well as the companies in which Apax Partners holds interests, (ii) Valeo and its group, (iii) Saint-Gobain and its group, and (iv) the SCOR SE group are not significant (the revenue generated by each of these business relations accounted for less than 0.5% of the total revenue reported by BNP Paribas).
- Finally, during the period of more than 12 years that Denis Kessler has sat on the Board, he has served under three successive Chief Executive Officers each having managed the Bank in accordance with his own personality and his own methods and practices. Consequently, the Board of directors deems that Denis Kessler's critical faculties are renewed with each effective change of management, thereby guaranteeing his independence. The Board also took into consideration Denis Kessler's financial expertise, a critical factor in understanding banking mechanisms (Doctorate in economics and HEC graduate), reinforced by his position as the Chairman and Chief Executive Officer of one of the world's major reinsurance companies.
- The two employee representatives on the Board, Sandrine Verrier and Hugues Epaillard, do not qualify as independent directors pursuant to the criteria contained in the Afep-Medef Code, despite their status and the method by which they were elected, which nevertheless guarantee their independence.
- Two directors appointed by the shareholders – the Chairman of the Board of directors Jean Lemierre, and the Chief Executive Officer Jean-Laurent Bonnafé – do not fulfil the independence criteria laid down by the Corporate Governance Code.

<u>Over half of the directors of BNP Paribas are therefore independent in terms of the criteria for independence contained in the Afep-Medef Code and the Board of directors' assessment.</u>

Directors' knowledge, skills and experience – Diversity and complementarity

When the Corporate Governance, Ethics, Nominations and CSR Committee (CGEN) reviews the skills and experience of potential directors, it is careful to maintain the diversity and collective skills of the Board of directors in light of changes to the Bank's strategy and in accordance with the Suitability policy. Thus, the Board brings together expertise in banking and finance, risk management, international digital transformation and CSR, as well as experience in Executive Management of large corporate groups.

These candidates are identified and recommended by the committee on the basis of criteria that combine personal and collective skills, according to the procedures in the Internal rules (article 4.2.1) and by the Suitability policy (section II Identification of, selection of and succession plan for Members of the management body and Key function holders), which ensure their independence of mind:

- competence, based on experience and the ability to understand the issues and risks, enabling the directors to make informed and effective decisions;
- courage, in particular to express opinions and make judgements, enabling the directors to remain objective;
- availability and assiduity, which allow for the necessary detachment and promote the directors' commitment and sense of responsibility regarding the exercise of their office;
- loyalty, which fosters directors' commitment to the Company and to their duties within the Board, which collectively represents the shareholders;
- directors' proper understanding of the Company's culture and ethics.

Directors all have a range of skills and experience that they have acquired during their professional careers. The table below aims to reflect this diversity within the Board of directors and lists more specific contributions made by each of the directors.

Director	Age	Gender	Nationality	Areas of expertise	End of term of office
Jean LEMIERRE (Chairman)	69	M	French	Banking/Finance Risks/Regulation monitoring International	2020
Jean-Laurent BONNAFÉ (Director and Chief Executive Officer)	58	M	French	Banking/Finance Business operations International	2022
Jacques ASCHENBROICH	65	M	French	Industrial International Transformation	2020
Pierre André de CHALENDAR	61	M	French	Industrial International CSR	2021
Monique COHEN	63	F	French	Banking/Finance Business operations CSR	2020
Wouter DE PLOEY	54	M	Belgian	Banking/Finance Digital Transformation	2022
Hugues EPAILLARD (Director elected by employees)	53	M	French	Organisation representing employees	2021
Rajna GIBSON-BRANDON	57	F	Switzerland	Financial markets Risks/Regulation monitoring CSR	2021
Marion GUILLOU	65	F	French	Risks/Regulation monitoring CSR Technology	2022
Denis KESSLER	67	M	French	Insurance Business operations Risks/Regulation monitoring	2021
Daniela SCHWARZER	46	F	German	Money markets Geopolitics International	2020
Michel TILMANT	67	M	Belgian	Banking/Finance Risks/Regulation monitoring International	2022
Sandrine VERRIER (Director elected by employees)	40	F	French	Organisation representing employees	2021
Fields WICKER-MIURIN	61	F	British/ American	Banking/Finance Financial markets International	2020

In addition, the complementary information referred to in article L.225-37-4-6° of the French Commercial Code regarding employees is given in section 7.3 "Strong Results" and section 7.6 "Our Employees" of this document[(1)].

(1) This information supplement the description of the diversity policy applied to members of the Board of directors.

1.c Directors' Ethical Conduct

- As far as the Board is aware, there are no conflicts of interests between BNP Paribas and any of the directors. The Suitability policy requires directors to report any situation likely to constitute a conflict of interest to the Chairman, the Board of directors may then ask the director in question to refrain from taking part in voting on the relevant issues.
- As far as the Board is aware, none of the Board members has been found guilty of fraud or been associated, as member of an administrative, management or supervisory body, or as Chief Executive Officer, with any insolvency, receivership or liquidation proceedings during at least the last five years.
- As far as the Board is aware, no member of the Board of directors is subject to any official public accusation and/or penalty. No director has been prohibited from acting in an official capacity during at least the last five years.
- There are no arrangements or agreements with key shareholders, customers, suppliers or other persons that involve the selection of any member of the Board of directors.
- The directors must carry out their duties in a responsible manner, particularly as regards the regulations relating to insider dealing. They are notably required to comply with legal requirements relating to being in possession of insider information. Under the terms of the Internal rules, they must also refrain from carrying out any transactions in BNP Paribas shares that could be regarded as speculative (article 4.3.1 of the Internal rules). They are informed of the periods during which they may, except in special circumstances, carry out any transactions in BNP Paribas shares (article 4.3.1 of the Internal rules).

1.d Directors' training and information

- Pursuant to the Internal rules, every director can ask the Chairman or the Chief Executive Officer to provide them with all the documents and information required to enable them to carry out their duties, to participate effectively in the meetings of the Board of directors and to make informed decisions, provided that such documents are necessary to the decisions to be taken and connected with the Board's powers (article 3.4.1 of the Internal rules).
- The directors have unrestricted and continuous access to the minutes of meetings of the Board's specialised committees using a special digital tool. This system also provides directors with a range of useful information in a secure and timely manner to facilitate them in their work. Since 2017, it has been possible to use this system to deliver e-learning training modules to directors.
- Committee meetings provide an opportunity to update the directors on the topical issues on the agenda. In addition, the Board is kept informed of changes in the banking regulations and reference texts concerning governance and can be trained on such occasions.
- On three training days (March, June and September 2019), directors received training in (i) the BNP Paribas Securities Service business line, (ii) options, (iii) Asset-Liability Management, (iv) the Bank's commitment to vulnerable customers, (v) financial security and anti-corruption policy, (vi) Recovery and Resolution and (vii) the directors' insurance programme. It was also the opportunity for directors to meet with the relevant managers in the Group.
- Pursuant to the provisions of the French Commercial Code on the training of directors elected by employees and the time allotted to them for the preparation of the meetings of the Board of directors and its committees, the Board determined that the content of the training programme would include the Bank's activities and organisation and applicable regulations.
- In 2019, one director elected by employees received a total of 8.5 hours of internal training with various operations managers as well as 14 hours individual training. Moreover, like any other directors, they receive the training provided by BNP Paribas as described below in addition to the training modules delivered by external training providers.

1.e Directors' attendance at Board and Committee meetings in 2019

Director	Board of directors	Specialised committees	Individual attendance rates
J. LEMIERRE	100%		100%
J-L. BONNAFÉ	100%		100%
J. ASCHENBROICH	100%	100%	100%
P. A. de CHALENDAR	92%	100%	95%
M. COHEN	100%	100%	100%
W. DE PLOEY	92%	100%	95%
H. EPAILLARD	100%	100%	100%
R. GIBSON-BRANDON	100%	90%	95%
M. GUILLOU	92%	94%	93%
D. KESSLER	100%	100%	100%
D. SCHWARZER	100%	100%	100%
M. TILMANT	92%	100%	96%
S. VERRIER[1]	83%	88%	85%
F. WICKER-MIURIN	100%	100%	100%
Average	**96%**	**98%**	

(1) Director elected by employees on maternity leave for part of 2019.

2. WORK OF THE BOARD AND COMMITTEES IN 2019

2.a Work of the Board in 2019

Meetings	Including extraordinary meetings	Average attendance rate	Strategy seminar
12	2	96%	1

The Board of directors, which determines BNP Paribas' strategy and overall business objectives based on proposals submitted by Executive Management and with the aim of promoting long-term value creation in the light of social and environmental issues:

- monitored the implementation of the 2017-2020 Transformation and Development Plan in terms of 2019 operating division results, the economic climate and the interest rate scenario. The guidelines for this 2017-2020 Transformation Plan were implemented in 2019 through:
  - strong growth in Group business with recurring savings expected;
  - continuation of the Group's digital transformation with, in particular, new digital customer experiences;
  - continuous improvement of the internal control and compliance system;
- was advised of the work completed in 2018 and the outlook for 2019 in terms of the Bank's CSR policy, operating under the aegis of the United Nations 17 Sustainable Development Goals;
- was informed of the impacts on Group equity of the first-time adoption of IFRS 16, replacing IAS 17 (entered into effect on 1 January 2019);
- monitored the changes in prudential requirements regarding capital and examined the provisional results of the Supervisory Review and Evaluation Process (SREP) and their impact on the solvency ratio;
- approved the sale of the stake in SBI Life;
- reviewed the signing of a memorandum of understanding with Deutsche Bank on the transfer of their prime brokerage business;
- approved the merger by absorption of BNP Paribas España and Opéra Trading Capital by BNP Paribas (SA);
- was advised of the situation regarding the Cardif system and the Group's systems in Italy;
- approved the Bank's IT and information system strategy;
- was informed of the causes of IT failures occurring in the first quarter of 2019 and associated action plans;
- examined the regulatory and legal changes provided for by the Pacte law of 22 May 2019;
- monitored changes in the shareholding structure and share price;
- reviewed the Bank's relative performed compared with its competitors;
- reviewed the regulatory ratios of the main systemically important banks;

- was informed of the results of the annual employee satisfaction survey (Global People Survey) and of the follow-up actions;
- reviewed the recommendation of the Central Works Council on the Bank's strategic guidelines and issued a response to its observations;
- examined the issuance amounts of debt securities in the form of senior and subordinated debt;
- acknowledged the Executive Management's comments on the net margin generated on new lending in 2018 and in the first half of 2019;
- continued to track the amounts allocated to the various objectives of the Company's share buyback programme authorised by the Annual General Meeting;
- authorised the delegations of authority for the issuance of debt securities, particularly for bonds and similar;
- examined the related-party agreements entered into and authorised in previous years but still in force in the past year;
- renewed the delegation of responsibility for the internal control of regulated subsidiaries so requesting and received a report from the subsidiaries in question;
- reviewed and approved the answers to written questions submitted by shareholders at the Annual General Meeting.

For the fifth time, SSM representatives from the ECB and representatives of the *Autorité de contrôle prudentiel et de résolution* (ACPR) attended a Board meeting (on 28 March 2019). They outlined their priorities for banking supervision for 2019, which was followed by an exchange of views with the members of the Board.

As in previous years, the Board of directors met on 18 December 2019 for a strategy seminar focused, *inter alia*, on the performance of the 2017-2020 strategic plan and the challenges for the Group's business lines within Domestic Markets, Corporate and Institutional Banking and International Financial Services.

2.b Work performed by the Financial Statements Committee and work approved by the Board of directors in 2019

Number of members	Meetings	Attendance rate
5	5	96%

Examination of the financial statements and financial information

The Financial Statements Committee:

- conducted quarterly reviews of the financial statements based on the documents and information provided by Executive Management and the work carried out by the Statutory Auditors;
- each quarter, analysed summary reports of the consolidated results and annualised return on equity, as well as results and profitability by field of activity;
- each quarter, reviewed the Group's consolidated balance sheet and changes to said balance sheet; on that occasion, it was given an update on off-balance sheet commitments;
- each quarter, examined the report on audit control points flagged by Group entities in the context of the certification of their financial statements. It analysed trends in the risk level observed for each of the thirty major accounting controls;
- each quarter, was advised of work to make models used to calculate credit risk provisions more reliable within the context of IFRS 9;
- reviewed changes in equity and the capital adequacy ratio with regard to the new prudential solvency regulations and new requirements imposed by the regulator;
- examined trends in revenues and the cost/income ratio by business for each quarter;
- examined the accounting internal control summary reviewed each quarter;
- examined the dividend distribution policy in view of the ECB recommendation concerning compliance with prudential and solvency rules;
- kept track of the changes in prudential requirements and reviewed changes in risk-weighted assets;
- examined the provisions for litigation on a regular basis;
- examined goodwill and proposed adjustments;
- conducted a detailed analysis of the composition of the Group's balance sheet;
- read the explanations relating to Credit Valuation Adjustment (CVA) adjustments.

Each quarter, when reviewing the results, it:

- heard the comments of the Chief Financial Officer and senior executive in charge of accounting and financial reporting;
- interviewed the Chief Financial Officer, without the presence of the Executive Management;
- heard the Statutory Auditors' comments and conclusions on the quarterly and annual financial statements, where applicable;
- asked the Statutory Auditors the questions it considered necessary, without the presence of the Executive Management or the Chief Financial Officer;
- reviewed the accounting certification mechanisms as part of the internal control procedures.

It reviewed the section of the management report concerning the internal control procedures relating to the preparation and processing of accounting and financial information in respect of 2018; it recommended approval by the Board of directors.

The Board:

- was informed of all the work of the Financial Statements Committee and the findings of the Statutory Auditors at the end of each reporting period;
- examined and approved the results of the fourth quarter of 2018, full-year 2018 and the first three quarters of 2019;
- reviewed and approved draft press releases at each meeting held to discuss the financial statements;
- acknowledged the report of the discussions held by the Financial Statements Committee with the Statutory Auditors and the Chief Financial Officer, without the presence of the Executive Management;
- approved the section of the management report on the preparation and processing of accounting and financial information in respect of 2018.

2

Ad hoc work performed by the Financial Statements Committee in 2019

Examination of the financial statements and financial information

The Financial Statements Committee reviewed the impact on the Group's consolidated financial statements of the first-time adoption of IFRS 16, which came into force on 1 January 2019.

> The Board:
>
> - was informed of the accounting impacts of the first-time adoption of IFRS 16, replacing IAS 17, on Group equity.

Relations with the Statutory Auditors

The Financial Statements Committee received a written certificate of independence from each of the Statutory Auditors.

It was informed of the amount of fees paid to the Statutory Auditors and reviewed the summary report on assignments not directly related to the statutory audit, without the presence of the Statutory Auditors. It authorised five assignments falling within the remit of non-prohibited services for which the Committee's prior authorisation is required.

2.c Work performed by the Financial Statements Committee and the Internal Control, Risk and Compliance Committee in their joint meetings, and work approved by the Board of directors in 2019

Number of members	Meetings	Attendance rate
10	3	97%

The committees:

- reviewed the Internal Capital Adequacy Assessment Process (ICAAP) report. They examined the Bank's assessment of its risks, and made sure that it had appropriate controls and the required capital to cover those risks;
- examined the Statutory Auditors' audit plan;
- discussed whether the prices of the products and services proposed to customers are compatible with the risk strategy (in accordance with the provisions of CRD 4);
- reviewed the main ongoing legal disputes and proceedings for which provisions have been, or may be, made;
- reviewed the economic assumptions used to prepare the budget;
- monitored the changes in prudential capital requirements and reviewed the results of the SREP, their impact on the solvency ratio and the recommendations made by the ECB;
- were informed of the remedial actions taken by the Group in response to two follow-up letters from the ECB issued as part of (i) the mission focusing on the assessment of the Pillar 3 Disclosure of BNPP Group and (ii) of the mission relating to the Trading Book Assessment;
- reviewed the ACPR's letter containing the Group's Global Systemically Important Bank score.

> The Board:
>
> - was informed of all the work performed by the Financial Statements Committee and the Internal Control, Risk and Compliance Committee;
> - approved the Internal Capital Adequacy Assessment Process and its conclusions.

2.d Work performed by the Internal Control, Risk and Compliance Committee and work approved by the Board of directors in 2019

Number of members	Meetings	Attendance rate
5	9	98%

Risks and liquidity

The Internal Control, Risk Management and Compliance Committee:

- reviewed the Risk Appetite Statement (RAS), the aggregate risk thresholds, taking into consideration changes in relation to liquidity risk, interest rate risk in the banking book and operational risk and approved the introduction of new indicators;
- was advised of the Internal Liquidity Adequacy Assessment Process report and reviewed the tolerance threshold above which it may be deemed that the liquidity position complies with the Bank's risk tolerance;
- reviewed the 2018 internal control report, including the report on operational risk, including IT and cybersecurity, permanent control and business continuity as well as the control of outsourced activities;
- monitored the Group's cybersecurity programme, its deployment schedule and the related budget. It was informed of projects still to be implemented and reviewed the level of maturity of each of the Group's business lines and territories in relation to the objectives set;
- reviewed the dashboard presented quarterly by the Head of RISK and reviewed trends in market, counterparty and credit risk as well as liquidity. It deliberated on the basis of information presented by RISK. The Head of RISK answered the committee's questions on the various categories of risks during a meeting;
- was informed of any risk indicator thresholds or limits that had been exceeded and, where applicable, any action plans decided by Executive Management;
- approved the renewal of risk limits for specific sectors and activities;
- decided whether the Group's remuneration policy was compatible with its risk profile.

The Board:

- was informed of all the Committee's work on Group risks and liquidity;
- approved changes to the Group's RAS;
- approved the liquidity risk tolerance level and the policies, procedures and internal systems relating to liquidity risk;
- approved the forwarded operational risk, permanent control and business continuity components of the internal control report to the ACPR;
- approved the renewal of segment budgets.

Ad-hoc work

The Internal Control, Risk and Compliance Committee:

- monitored the outcome of the General Inspection's mission relating to the loss on derivatives used for hedging purposes in the United States in the fourth quarter of 2018;
- reviewed the IT Department's action plan following the incidents occurring in the first quarter of 2019 and asked to be regularly informed regarding the implementation of this plan;
- was advised of the follow-up letter on the ECB's shipping mission;
- was advised of the follow-up letter on an ECB Deep Dive on outsourcing;
- reviewed the risks associated with the reform of the Eonia and Euribor indices as well as the Group action plan required by the ECB;
- was advised of the summary energy transition report drafted by RISK.

The Board:

- was informed of the Committee's review of the ECB follow-up letter relating to the shipping mission and the Deep Dive on outsourcing;
- validated the Bank's action plan within the context of the reform of the Eonia and Euribor indices as required by the ECB.

Compliance, internal control, litigation and periodic control

The Internal Control, Risk and Compliance Committee:

- reviewed the section of the management report on internal control and submitted it for the approval of the Board;
- reviewed the 2018 internal control report including the Compliance Risk Assessment report, the key compliance points across all business lines and geographical areas, and the periodic control report;
- reviewed reports on the organisation of internal control systems on anti-money laundering and terrorism financing, as well as on asset freezing in accordance with the provisions of the Decree of 21 December 2018;
- reviewed the report on the assessment and monitoring risks in 2018, in accordance with the provisions of the Decree of 3 November 2014 on the internal control of companies operating in the banking, payment services and investment services sector subject to the control of the ACPR. It assessed the effectiveness of the policies and systems in place;
- examined the annual update to the recovery plan and resolution documents, and recommended their approval by the Board; examined changes in French and European resolution regulations; and was informed of the complexities linked to the set-up of the Total Loss Absorbing Capacity (TLAC) and of the Minimum Requirement for own funds and Eligible Liabilities (MREL) mechanisms and the regulatory changes in progress;
- was informed of the modification requests and additional requests made by the regulators concerning the recovery plan and resolution documentation;
- reviewed, at each of its meetings, the list of ongoing legal disputes and proceedings, as well as the developments in each of the cases;
- discussed the main outcomes of the periodic control carried out in 2018 and in the first half of 2019;
- reviewed the General Inspection half-year report;
- analysed the Compliance Function's half-year report;
- continued to monitor the implementation of the remediation plan initiated in 2014 at the US authorities' request (commitments made by BNP Paribas to control activities carried out in US dollars);
- continued to monitor the outcome of the General Inspection review of remediation;
- reviewed the MiFID II control framework and the results of the controls implemented in 2019;
- was advised of the impacts of the Volcker rule on the Group and the findings of the Annual Report on the deployment of this device within the Group;
- regularly reviewed the fines imposed on the Bank by supervisors.

The Board:

- was informed of all the Committee's work on internal control, risks and compliance;
- approved the section of the management report on 2018 internal control;
- approved the forwarded compliance and periodic control sections of the internal control report to the ACPR;
- approved the forwarding to the ACPR of reports on the organisation of internal control systems on anti-money laundering and terrorism financing, as well as on asset freezing;
- heard the results of the work done based on a report drawn up for the assessment and monitoring of risks in 2018; confirmed that the report on the assessment and monitoring of risks had been forwarded to the ACPR;
- approved the recovery plan, the updated version of which was submitted to the ECB;
- reviewed the modifications made to the resolution documents, of which the updated version was submitted to the ACPR;
- was informed of legislative work on the Bank resolution carried out by the European authorities;
- was informed of the results and controls carried out in 2019 on the MiFID II framework;
- reviewed the Group's policy on the Volcker rule and the findings of the Annual Report on the deployment of this device within the Group.

Ad-hoc work

The Internal Control, Risk and Compliance Committee:

- was informed of recent changes to the French Banking Law;
- acknowledged the ACPR letter of formal notice resulting from the "Asset freezing" mission;
- was informed of the Group's Correspondent Bank activities.

The Board:

- was informed by the Committee of the ACPR letter of formal notice resulting from the "Asset freezing" mission.

The Committee proceeds to the hearing of the Heads of the RISK, Compliance, General Inspection and Legal functions, without the presence of the Executive Management.

The Board:

- heard the report of the interviews.

2.e Work performed by the Corporate Governance, Ethics, Nominations and CSR Committee and work approved by the Board of directors in 2019

Number of members	Meetings	Attendance rate
4	5	100%

Changes in the membership of the Board and its specialised committees

The Governance, Ethics, Nominations and CSR Committee:

- reviewed the expiry dates of the directors' directorships and proposed that the Board put the renewal of the terms of directorships expiring in 2019 to the vote at the Shareholders' Annual General Meeting, namely those of Jean-Laurent Bonnafé, Marion Guillou, Wouter De Ploey and Michel Tilmant;
- proposed that the Board (i) asks the Shareholders' Annual General Meeting to vote on the ratification of the appointment of Rajna Gibson-Brandon and (ii) appoints her as a member of the CCIRC;
- proposed that the directorships of Chief Executive Officer, Jean-Laurent Bonnafé, and the Chief Operating Officer, Philippe Bordenave, should be renewed;
- examined the situation of directors asked to take up corporate offices outside the Group, as provided for in the Suitability policy;
- reviewed the appointment of Christian Noyer as a non-voting director.

The Board:

- proposed that the Shareholders' Annual General Meeting renews the terms of office of the directors in question;
- proposed that the Shareholders' Annual General Meeting should ratify the appointment of Rajna Gibson-Brandon as director and appointed her as a member of the CCIRC;
- reappointed Jean-Laurent Bonnafé to his position as Chief Executive Officer and, at the proposal of the Chief Executive Officer, reappointed Philippe Bordenave to his position as Chief Operating Officer;
- appointed Christian Noyer as a non-voting director.

Governance

The Governance, Ethics, Nominations and CSR Committee:

- continued the work undertaken on the succession of executive corporate officers, both in the event of premature succession and as part of a long-term review, taking into account the major transformation challenges within the banking sector, and reviewed the best way to ensure the efficiency, balance, stability and visibility of governance in the interest of the Company and its shareholders;
- reviewed the succession plan for Key function holders, both in the event of premature succession and in advance of long-standing departure plans;

- reviewed the implications for the Bank of the Pacte law (of 22 May 2019) and the Soilihi law (of 19 July 2019), on the Articles of association, the Internal rules and the Suitability policy. The Committee, in this regard:
  - reviewed the language used regarding BNP Paribas missions prepared by Executive Management,
  - asked that the Board of directors take the social and environmental challenges associated with its activity into consideration in accordance with its social interest,
  - reviewed the review of the Articles of association and the Internal rules to determine procedures for the appointment of directors representing employee shareholders,
  - proposed amending the Articles of association to enable the Board of directors to take decisions by means of written consultation in the specific cases listed by law,
  - examined the Suitability policy in the specific context of the Pacte law regarding: (a) the need to ensure that agreements between the Bank and its corporate officers are entered into on an arm's length basis and (b) balanced gender representation right through to the end of the selection process for the Chief Operating Officer(s),
  - set out a policy on current agreements in accordance with the provisions of the Pacte law;
- checked on the skills of Key function holders with the Human Resources Department;
- was informed of the implementation and outcome of controls associated with the Corporate Governance Policy for BNP Paribas Group Entities applicable to all subsidiaries within the BNP Paribas (SA) scope of prudential consolidation, whether or not they are governed outside Europe;
- took note of the minutes of the Nominations Committees of the subsidiaries with a balance sheet total of over EUR 5 billion;
- was informed of the content of exchanges between the Chairman of the Board of directors and investors about the Bank's governance;
- examined the report on corporate governance with respect to 2018; it recommended approval by the Board of directors.

> In order to comply with the new legislation, the Board approved:
>
> - within the context of the Pacte and Soilihi laws, the proposed amendments to the Articles of association to be put to the vote at the Annual General Meeting on 19 May 2020, as well as the updated version of the Internal rules and the Suitability policy;
> - the policy on current agreements;
>
> It also approved the corporate governance report with regard to 2018.

Assessment of the Board of directors

The Committee:

- acknowledged the results of the 2018 internal assessment of the Board of directors. The assessment confirmed the directors' satisfaction with the way in which the Board operates and the optimal nature of the relationship between the Chairman and the Chief Executive Officer. It noted the professionalism of the team, the transparency of discussions and the atmosphere of trust that prevails within the Board;
- it monitored the implementation of the action plan arising from the assessment conducted in 2018. This was reflected in (i) the ongoing formalisation of succession processes for executive corporate officers and discussions between members of the Committee and the Chief Executive Officer on succession processes for the Group's key directors, (ii) presentations to the Board by operations managers about their jobs or the geographical area for which they are responsible and (iii) greater balance between time spent on regulatory issues and time spent on business;
- proposed an action plan to the Board that was in keeping with the action plan set out the previous year, in particular:
  - (i) regular Board and Committee meetings to discuss succession processes for executive corporate officers and key executives,
  - (ii) ongoing presentations to the Board by operational managers.

> The Board approved the action plan following the 2018 assessment.

In addition, in accordance with the 2014 Board decision, the 2020 assessment will be conducted by an outside firm.

Code of conduct

The Corporate Governance, Ethics, Nominations and CSR Committee, in accordance with its powers, dedicated a session to examining the deployment of the Code of conduct within the subsidiaries and the Group's geographical areas. In particular, it was informed of the gradual incorporation of the provisions of the Code of conduct into key human resources processes and measures taken by the Group to encourage a "Speak up culture" amongst employees as part of the Bank's whistleblowing system.

> The Board of directors continued to monitor the deployment of the Code of conduct within the Group's subsidiaries and geographical areas.

Directors' remuneration

In light of the Remuneration Committee's approval of the allocation of remuneration paid to individual directors for 2019, the Corporate Governance, Ethics, Nominations and CSR Committee examined the actual attendance of each director at the Committees and Board in 2019.

Social and Environmental Responsibility

As part of the extension of its powers, the Corporate Governance, Ethics, Nominations and CSR Committee examined the report on the Group's social and environmental responsibility and proposed some amendments and modifications.

The Committee:

- examined the Group's social and environmental responsibility report, in particular the materiality matrix listing the 21 most significant non-financial issues for the Bank's stakeholders, including climate change and energy transition which were identified as crucial issues;

- reviewed the Bank's statement under the British Modern Slavery Act which aims to ensure that the Bank's business activity does not involve slavery or human trafficking. This statement is included in the Group's social and environmental responsibility report;

> The Board of directors:
>
> - approved the Group's social and environmental responsibility report, including the Extra-Financial Performance Statement, with the amendments proposed by the Committee;
> - approved the Bank's statement in relation to the Modern Slavery Act.

2.f Work performed by the Remuneration Committee and work approved by the Board of directors in 2019

Number of members	Meetings	Attendance rate
3	4	100%

One member of the Remuneration Committee is also a member of the Internal Control, Risk and Compliance Committee promoting therein the work of the Committee on the adequacy of BNP Paribas' remuneration and risk policy, thus meeting the requirements of CRD 4.

The Remuneration Committee:

<u>In respect of the year 2018</u>

- after receiving detailed information on Group employees whose responsibilities within the Bank have a significant impact on the Group's risk profile ("material risk takers"),
  - examined the issues relating to their remuneration;
  - reviewed the final scope of the Group's material risk takers;
  - reviewed the 2019 published report on remuneration paid to the Group's material risk takers for 2018;
  - examined the final parameters for determining the variable remuneration package for the Global Markets business line and was informed of the final package awarded and the way in which individual awards were made for this business line;
  - reviewed the list of the highest paid employees in 2018;
  - audited the 2018 remuneration of the Group's Head of RISK and Head of Compliance;
  - examined the quantitative and qualitative performance criteria linked to the annual variable remuneration of executive corporate officers and proposed to the Board to approve the variable remuneration to be paid to them in respect of 2018;
  - reviewed the Say on Pay sheets for each executive corporate officer of BNP Paribas;
  - was advised of the principles of the remuneration policy, actual remuneration, allowances and benefits in kind granted for the 2018 performance year to the corporate officers and Heads of RISK and Compliance of Group subsidiaries that meet the threshold set by law and that have delegated these missions to the Committee;
  - reviewed the resolution on remuneration paid to the Group's material risk takers that is subject to an annual advisory vote at the Shareholders' Annual General Meeting;
  - was informed of the summary of the General Inspection report concerning the implementation of the review of material risk takers' remuneration in respect of 2018;
  - was informed of the ECB's outcomes within the context of its annual supervision, for the 2018 performance year, of the implementation of the Group's remuneration policy and other specific missions;

<u>In respect of the year 2019</u>

- reviewed the scope of the Group's material risk takers identified as an initial estimate in respect of 2019;
- examined the rules on deferred remuneration and the variable remuneration payment terms applicable to the Group's material risk takers in 2019;
- examined the initial parameters used to determine the variable remuneration package for Global Markets business line employees for the 2019 performance year;
- reviewed the remuneration policy applicable to executive corporate officers on the basis of their 2019 performance and incorporated social and environmental responsibility criteria;
- reviewed the follow-up of the implementation, in 2019, of provisions of the Group's remuneration policy regarding issues relating to the management of conflicts of interest and the protection of clients' interests, as part of European Directive MiFID II which entered into force on 3 January 2018;
- determined remuneration procedures for non-voting directors that are identical to those applicable to directors who are also committee members and examined the amount awarded to the latter for 2019, based on actual attendance at Board and Committee meetings;
- renewed, exactly, the remuneration procedures for directors;
- reviewed the allocation of directors' remuneration and the amount paid to each in respect of 2019 on the basis of an audit of director's actual attendance at Board and Committee meetings.

The Board:

- was informed of all the Remuneration Committee's work;
- assessed and approved the Committee's assessment of the quantitative and qualitative criteria linked to the annual variable remuneration of executive corporate officers in respect of the 2018 performance year;
- ensured that the change in the variable remuneration of executive corporate officers was appropriate;
- approved the Say on Pay sheets with respect to 2018 of executive corporate officers to be submitted to the vote of the Shareholders' Annual General Meeting;
- heard the Committee Chairman's report on the appropriateness of the remuneration of the Head of RISK and Head of Compliance for the 2018 performance year;
- was informed by the Committee Chairman of the approach used to identify those employees whose professional activities have a significant impact on the Company's risk profile and the principles for their remuneration as proposed by Executive Management for the 2019 performance year;
- adopted the remuneration policy for executive corporate officers in respect of 2019;
- approved remuneration procedures for payments made to non-voting directors as well as the amount for 2019;
- approved the individual split of remuneration allocated to directors for 2019.

INTERNAL RULES OF THE BOARD OF DIRECTORS

PREAMBLE

The rules concerning:

- the Board of directors;
- the members of the Board of directors, including their rights and obligations;
- the Board of directors' Committees;

are set by the statutory and regulatory provisions, the Company's Articles of Association, and these rules (in addition to these Internal rules of the Board of directors, there is the Policy on the suitability of Members of the management body and Key function holders mentioned in 1.3 below).

The Board of directors also takes into account the French market guidelines concerning corporate governance and, in particular, the provisions of the corporate governance Code for listed companies published by the French employers' organisations *Association Française des Entreprises Privées* (Afep) and the *Mouvement des Entreprises de France* (Medef), hereinafter called the Afep-Medef Code, to which BNP Paribas (the "**Company**") refers.

The Board of directors is a collegial body that collectively represents all shareholders and acts in all circumstances in the corporate interests of the Company.

The Board of directors is assisted by specialised committees:

- financial statements Committee;
- internal control, risk management and compliance Committee;
- corporate governance, ethics, nominations and CSR Committee; and
- remuneration Committee;

as well as by any *ad hoc* committee.

PART ONE – THE BOARD OF DIRECTORS, COLLEGIAL BODY

ARTICLE 1. DUTIES OF THE BOARD OF DIRECTORS

The Board of directors discusses any question coming within the scope of its statutory and regulatory duties and contributes to promoting the corporate values aimed, in particular, to ensuring that the conduct of BNP Paribas' activities by its employees complies with the highest ethical requirements in order to protect the reputation of the Bank.

In particular and non-exhaustively, the Board of directors is competent in the following areas:

1.1. ORIENTATIONS AND STRATEGIC OPERATIONS

The Board of directors:

- determines BNP Paribas' s business orientations and supervises their implementation by the Executive Management, taking the social and environmental challenges of BNP Paribas' activities into consideration;
- subject to the powers expressly allocated to the shareholders' meetings and within the limit of the corporate purpose, it handles any issue concerning the smooth running of the Company and settles by its decisions any matters concerning it;
- gives its prior approval with respect to all investment or disinvestment decisions (other than portfolio transactions) in an amount in excess of EUR 250 million, and any proposal to acquire or dispose of shareholdings (other than portfolio transactions) in excess of that threshold, submitted to it by the Chief Executive Officer. It is also regularly informed by the Chief Executive Officer of significant transactions which fall below this limit;

- gives its prior approval to any significant strategic operation which falls outside the approved orientations;
- promotes long-term value creation by BNP Paribas.

1.2. CODE OF CONDUCT

The Board of directors and the Executive Management have developed a Code of conduct of BNP Paribas Group which defines the standards of conduct in line with the values and missions determined by the Bank. This Code, which shall be integrated by each business line and each employee, governs the actions of each employee and guides the decisions at every level of the organisation. For this purpose, the Board ensures the Executive Management implements this Code into business lines, countries and regions.

1.3. GOVERNANCE, INTERNAL CONTROL AND FINANCIAL STATEMENTS

The Board of directors:

- appoints the Chairman, the Chief Executive Officer (CEO) and, on the recommendation of the latter, the Chief Operating Officer(s) (COO);
- sets any limits to the powers of the Chief Executive Officer and of the Chief Operating Officer(s);
- examines the system of governance, which includes, in particular, a clear organisational structure with well defined, transparent and consistent sharing of responsibilities, efficient processes to identify, manage, monitor and report the risks to which the Company is or might be exposed to; it periodically assesses the efficiency of this governance system and ensures that corrective measures have been taken to remedy any failings;
- determines the orientations and controls their implementation by the actual managers of the monitoring measures in order to guarantee an effective and prudent management of the Company, including the segregation of duties in the organisation of the Company and the prevention of conflicts of interests;
- ensures the fulfilment of the obligations which are incumbent on it concerning internal control, and, in particular, examines, at least twice a year, the activity and the results of the internal control;
- approves the management report and the corporate governance report attached to it;
- carries out the controls and verifications which it deems appropriate;
- ensures that the Chief Executive Officer and/or Chief Operating Officer(s) implement a policy of non-discrimination and of diversity including gender balance in management bodies;
- ensures the implementation of process for preventing and detecting corruption and influence-peddling for which it receives all the information required for that purpose;
- examines and closes the financial statements and ensures their sincerity;
- reviews, at least once a year, the draft budgets and the drafts of the various statutory and regulatory reports which the Chief Executive Officer submits to it;
- prepares a suitability policy that defines the assessment of Members of the management body and of Key function holders (the "Policy on the suitability of Members of the management body and Key function holders"); the Board of directors (and its committees) apply this policy and revise it regularly to account in particular for any regulatory changes;
- gives its approval prior to the dismissal of the Heads of the following functions: Risk Management, Compliance, or the General Inspection.

1.4. RISK MANAGEMENT

The Board of directors:

- regularly examines, in connection with the strategy it has defined, the opportunities and risks, such as financial, legal, operational, social, and environmental risks, as well as the measures taken as a result;
- as such, approves and regularly reviews the strategies and policies governing the taking, management, monitoring and reduction of the risks to which the Company is or might be exposed to, including the risks caused by the economic environment. In particular, the Board of directors approves the global risk limits and puts into place a specific process organising its information and, as the case may be, the referral of the matter to it in the event these limits are exceeded.

1.5. COMMUNICATION

The Board of directors:

- ensures that the financial information disclosed to the shareholders and the markets is of high quality;
- controls the process of financial publication and communication, quality and reliability of the information intended to be published and communicated by the Company.

1.6. REMUNERATION

The Board of directors:

- allocates, without prejudice to the powers of the Annual General Meeting, the directors' attendance fees;
- adopts and regularly reviews the general principles of the remuneration policy of the Group which relates, in particular, to the categories of staff including the risk takers, staff engaged in control functions and any employee who, given his overall income, is in the same remuneration bracket as those whose professional activities have an impact on the risk profile of the Group;
- decides, without prejudice to the powers of the Annual General Meeting, the remuneration of the managers who are corporate officers *(dirigeants sociaux)*, in particular their fixed and variable remuneration as well as any other means of remuneration or benefit in kind.

1.7. RESOLUTION

The Board of directors settles the preventive recovery plan of the institution, as well as the items necessary to establish the resolution plan communicated to the competent regulatory authorities.

ARTICLE 2. FUNCTIONING OF THE BOARD OF DIRECTORS

2.1. ORGANISATION OF THE MEETINGS

The Board of directors meets at least four times a year and as often as circumstances or BNP Paribas' interest requires this.

Notices of meetings may be communicated by the Secretary of the Board.

The Secretary of the Board prepares all of the documents necessary to the Board meetings and arranges to place all of the documentation at the disposal of the directors and other participants in the meetings.

An attendance register is kept, which is signed by the directors taking part in the meeting. It mentions the names of the directors considered as present.

The Board of directors' decisions are recorded in minutes by the Secretary of the Board which are entered into a special register, in accordance with the laws in force. The Secretary of the Board of directors is authorized to issue and certify copies or excerpts of the Board minutes. Each set of Board minutes must be approved at a subsequent Board meeting.

The decisions of the Board of directors are carried out either by the Chief Executive Officer, or a Chief Operating Officer, or by any special representative appointed by the Board of directors.

2.2. MEANS OF PARTICIPATION

Directors taking part in the meeting by videoconference (visioconference) or telecommunication means enabling their identification, guaranteeing their effective participation, transmitting at least the voices of the participants, and meeting, through their technical features, the needs of confidentiality, of continuous and simultaneous retransmission, with the exception of Board meetings closing out the financial statements and the Annual Report, shall be deemed to be present for the purpose of calculating both the quorum and the majority. The minutes state, as the case may be, the occurrence of any technical incidents if they disturbed the conduct of the meeting.

PART TWO – THE MEMBERS OF THE BOARD OF DIRECTORS

ARTICLE 3. COMPOSITION, INFORMATION AND SKILLS

3.1. CHAIRMAN OF THE BOARD OF DIRECTORS

3.1.1. Relations with the Company's other bodies and with parties outside the Company

In relations with the Company's other bodies and with parties outside the Company, the Chairman of the Board of directors alone has the power to act on behalf of the Board of directors and to express himself in its name, except in exceptional circumstances, and except where specific assignments or duties are entrusted by the Board of directors to another director.

The Chairman makes sure that he maintains a close and trusting relationship with Executive Management. He provides him with his assistance and his advice while respecting his executive responsibilities. He organises his activities so as to ensure his availability and put his experience at the Company's service. He contributes to promoting the values and image of the Company, both within the Group and externally.

Coordinating closely with Executive Management, he can represent the Group in its high level relationships, and particularly with major clients, public authorities and the institutions on national, European and international levels.

He ensures that the quality of relations with shareholders is maintained, in close coordination with the work of Executive Management in this area. He reports on this mission to the Board.

He ensures that principles of corporate governance are defined and implemented.

The Chairman is the custodian of the proper functioning of the Board of directors of BNP Paribas. As such:

- with the support of the corporate governance, ethics, nominations and CSR Committee, with the approval of the Board of directors and of the Annual General Shareholders' Meeting, where appropriate, he endeavours to build an efficient and balanced Board, and to manage replacement and succession plan processes related to the Board of directors and nominations on which it will have to opine;
- he can attend all committee meetings and can add any subject to the agenda of the latter which he considers to be relevant;
- he ensures that the directors have the documentation and information necessary to carry out their duties in a timely manner and in a clear and appropriate form.

3.1.2. Organisation of the work of the Board of directors

The Chairman organises and manages the work of the Board of directors in order to allow it to carry out all of its duties. He sets the timetable and agenda of Board meetings and convenes them.

He ensures that the work of the Board of directors is well organised, in a manner conducive to constructive discussion and decision-making. He directs the work of the Board of directors and coordinates its work with that of the specialised Committees.

He sees to it that the Board of directors devotes an appropriate amount of time to issues relating to the future of the Company and particularly its strategy.

The Chairman is kept regularly informed by the Chief Executive Officer and other members of the Executive Management of significant events and situations relating to the business of the Group, particularly those relating to: deployment of strategy, organisation, investment or disinvestment projects, financial transactions, risks, financial statements.

The Chief Executive Officer provides the Chairman with all information required under French law regarding the internal control report.

He may ask the Chief Executive Officer or any manager, and in particular, the heads of the control functions, for any information likely to assist the Board and its committees in the carrying out of their duties.

He may hear the Statutory Auditors in order to prepare the work of the Board of directors and of the financial statements' Committee.

3.2. DIRECTORS

They undertake to act in the corporate interest of BNP Paribas and to comply with all of the provisions of these Internal rules that are applicable to them, and more specifically the procedures of the Board of directors.

3.3. OTHER PARTICIPANTS

3.3.1. Non-voting directors (censeurs)

The non-voting directors attend the meetings of the Board and of the specialised Committees in an advisory capacity.

3.3.2. Statutory Auditors

The Statutory Auditors attend the meetings of the Board and of the specialised Committees which examine or close the annual or interim financial statements and may attend the meetings of the Board and of the specialised committees when the Chairman of the Board considers it necessary.

3.3.3. Persons invited

The Board can decide to invite one or several persons to attend the meetings.

3.3.4. Representative of the Central Works Committee

The representative of the Central Works Committee attends the meetings of the Board in an advisory capacity.

3.3.5. Secretary of the Board

The Secretary of the Board is appointed by the Board and attends the meetings of the latter.

3.3.6. Heads of the control functions

If necessary, in the case of particular events affecting or likely to affect BNP Paribas, the heads of the control functions can report directly to the Board and, as the case may be, to its committees, to express their concerns without referring to the actual managers.

The individuals specified in point 3.3 are subject to the same rules of ethics, confidentiality and professional conduct as the directors.

3.4. ACCESS TO INFORMATION

3.4.1. Information and documentation

For the purpose of efficiently participating in the Board of directors' meetings and making enlightened decisions, each director may ask that the Chairman or the Chief Executive Officer communicates to him all documents and information necessary to perform his duties, if these documents are useful for making decisions and are related to the Board of directors' powers.

Requests are sent to the Secretary of the Board of directors who informs the Chairman thereof.

When the Secretary of the Board of directors considers this preferable, for reasons of convenience or confidentiality, the documents thus placed at the disposal of the directors as well as of any person attending the meetings of the Board are consulted through the Secretary of the Board or through the competent employee of the Group.

3.4.2. Systems

The placing at disposal of the directors or of any person attending the Board meetings of all of the documentation with a view to meetings of the Board, may be done by any means, including dematerialised. In this case, all the measures of protection considered necessary are taken to protect the confidentiality, the integrity and the availability of the information and each member of the Board or any person who has received the documentation is responsible not only for the systems and media thus placed at disposal but also for their access.

3.5. TRAINING, INDIVIDUAL AND COLLECTIVE SKILLS

The directors of BNP Paribas possess, both individually and collectively, the expertise, experience, skills, understanding and personal qualities necessary, notably in terms of professionalism and integrity, to properly perform their duties in connection with each of the significant activities of BNP Paribas and guaranteeing efficient governance and supervision.

The directors shall ensure that their knowledge is kept updated in compliance with the Policy on the suitability of Members of the management body and Key function holders.

The directors representing employees are given time dedicated to training determined by the Board in accordance with the regulations in force. At the end of the training, the training centre chosen by the Board must issue a certificate of regular attendance, which the director must remit to the Secretary of the Board.

ARTICLE 4. OBLIGATIONS

4.1. HOLDING AND KEEPING OF BNP PARIBAS SHARES

Every director appointed by the General Shareholders' Meeting must personally hold 1,000 shares. The director must hold all of the shares within twelve months of his appointment. At the expiry of this period, every director concerned shall make sure to keep the minimum number of BNP Paribas' shares throughout his term of office.

The directors undertake not to engage in any individual hedging or insurance strategies to cover their risk on such shares.

This obligation does not concern directors representing employees.

4.2. ETHICS - CONFIDENTIALITY

4.2.1. Ethics

4.2.1.1. Availability and regular attendance

The members of the Board of directors shall devote the time and the effort necessary to carry out their duties and responsibilities, in compliance with the Policy on the suitability of Members of the management body and Key function holders.

The directors representing employees are given preparation time determined by the Board in accordance with the Guidelines on the assessment of the suitability of Members of the management body and Key function holders.

4.2.1.2. Independence and loyalty

Every member of the Board of directors shall at all times maintain his or her independence of mind, in compliance with the Policy on the suitability of Members of the management body and Key function holders.

He shall act with loyalty towards the other directors, shareholders and BNP Paribas.

He shall refuse any benefit or service liable to compromise his independence.

4.2.1.3. Duty of vigilance

Every member of the Board of directors is bound by a duty of vigilance with respect to the keeping, use and, as the case may be, the return of the systems, documents and information placed at disposal.

4.2.2. Confidentiality

Any director and any person participating in the work of the Board is bound by an obligation of absolute confidentiality about the content of the discussions and decisions of the Board and of its committees as well as the information and documents which are presented therein or which are provided to them, in any form whatsoever.

Except as provided by law, he is prohibited from communicating to any person outside of the Board of directors any information that has not been made public by BNP Paribas.

4.3. ETHICAL CONDUCT – LIMITATION ON DIRECTORSHIPS - CONFLICTS OF INTERESTS – PERSONAL DECLARATIONS

4.3.1. Ethical conduct

If directors have any questions related to ethical conduct, they may consult the head of the Group Compliance Function.

The legislation relating to insider trading applies particularly to directors both in a personal capacity and when carrying out their duties within companies that hold shares in BNP Paribas. They are required, in particular, to respect the legal requirements governing the definition, communication and exploitation of privileged information, the principal provisions of which are communicated to them when they take directorship.

Directors can only deal in securities of BNP Paribas on a personal basis during the period of six-weeks beginning on the day after the publication of the quarterly and annual financial statements, or after the publication of a press release on the Company's running, unless they are in possession during that period of information that puts them in the position of an insider with respect to the stock exchange regulations.

Directors shall refrain from any transactions that could be considered as speculative, and in particular from leveraged purchases or short sales, or short-term trading.

The director as well as the persons with close connections with him are under the obligation to declare to the French Financial Markets Authority (Autorité des Marchés Financiers – AMF), which ensures the publication thereof, and to BNP Paribas the transactions that they execute in BNP Paribas shares and the financial instruments related thereto.

4.3.2. Limitation on directorships

The director complies with the statutory and regulatory provisions which are applicable to him or her, or which are applicable to BNP Paribas, concerning limitation on directorships, as well as the Policy on the suitability of Members of the management body and Key function holders.

4.3.3. Conflicts of interests

The director complies with the applicable statutory and regulatory provisions regarding conflicts of interests – in particular the so-called "related-party agreements" *(conventions réglementées)* regime as well as with the Policy on the suitability of Members of the management body and Key function holders.

Whatever the circumstances, in the event of breach of the obligations with respect to conflict of interests by a director, the Chairman of the Board of directors shall take all the statutory measures necessary in order to remedy it. He can, furthermore, keep the relevant regulators informed of such acts.

4.3.4. Personal declarations

The director undertakes to inform the Secretary of the Board as soon as possible of any change in his personal situation (change of address, appointment, directorships, duties carried out, or criminal, civil, or administrative convictions, etc.).

In particular, and in compliance with the Policy on the suitability of Members of the management body and Key function holders, the director shall inform, as soon as possible, the Chairman of the Board of directors of any criminal or civil conviction, management prohibition, administrative or disciplinary sanction, or measure of exclusion from a professional organisation, as well as any proceedings liable to entail such sanctions against him or her, any dismissal for professional misconduct, or any dismissal from a directorship of which he or she may be the subject. Similarly, the director informs the Chairman of the Board of directors of any criminal or civil order entered against it, administrative or disciplinary sanction or measure of exclusion from a professional organisation, as well as of any Court-ordered reorganisation or liquidation measure of which a company of which he is the manager, shareholder or partner is the subject or would be liable to be the subject.

ARTICLE 5. REMUNERATION OF DIRECTORS AND NON-VOTING DIRECTORS (CENSEURS)

The overall amount of remuneration given to the directors is determined by the General Shareholders' Meeting.

The individual amount of remuneration given to directors is determined by the Board of directors pursuant to a proposal by the remuneration Committee. It comprises a predominant variable portion based on actual participation in meetings, regardless of the means. Directors residing abroad receive an increased amount, except where they may participate in meetings of the Board of directors by videoconference or telecommunications means.

Actual participation in the Committees entitles committee members to an additional remuneration, the amount of which may differ depending on the Committees. Committee members receive this additional remuneration for their participation in each different Committee. The Chairmen of Committees also receive an additional remuneration.

The remuneration of the non-voting directors is determined by the Board of directors pursuant to a proposal of the Remuneration Committee.

PART THREE – THE BOARD OF DIRECTORS' SPECIALISED COMMITTEES

To facilitate the performance of their duties by BNP Paribas' directors, specialised committees are created within the Board of directors.

ARTICLE 6. COMMON PROVISIONS

6.1. COMPOSITION AND SKILLS

They consist of members of the Board of directors who do not carry out management duties within the Company. They include the required number of members who meet the criteria required to qualify as independent, as recommended by the Afep-Medef Code. The members of the committees have the knowledge and skills suited to carry out of the missions of the committees in which they participate.

The remunerations Committee includes at least one director representing the employees.

Their remits do not reduce or limit the powers of the Board of directors.

The Chairman of the Board of directors sees to it that the number, missions, composition, and functioning of the committees are adapted at all times to the statutory and regulatory provisions, to the Board of directors' needs and to the best corporate governance practices.

By decision of the Board, the internal control, Risk management and compliance Committee (CCIRC), the remunerations Committee (RemCo), the corporate Governance, ethics, nominations and CSR Committee (CGEN) may, in accordance with the provisions of Article L.511-91 of the French Monetary and Financial Code *(Code Monétaire et Financier)* ensure their missions for the companies of the Group under the supervision of the regulator on a consolidated or sub-consolidated basis.

6.2. MEETINGS

The Committees shall meet as often as necessary.

6.3. MEANS PLACED AT THE DISPOSAL OF THE COMMITTEES

They may call upon outside experts when needed.

The Chairman of a Committee may ask to hear any officer within the Group, regarding issues falling within this Committee's jurisdiction, as defined in the present Internal rules.

The Secretary of the Board prepares all of the documents necessary to the meetings of the specialised Committees and organises the placing of the documentation at the disposal of the directors and other participants in the meetings.

This documentation can be placed at disposal by any means, including dematerialised. In this case, all the measures of protection considered necessary are taken for the purposes of protecting the confidentiality, integrity and the availability of the information and each member of the specialised Committee concerned or any person who has received the documentation is responsible not only for the systems and media and their provision but also for their access.

6.4. OPINIONS AND MINUTES

They express opinions intended for the Board of directors. The Chairmen of committees, or in case of their impediment another member of the same committee, present a verbal summary of their work at the next Board of directors' meeting.

Written reports of Committees' meetings are prepared by the Secretary of the Board and communicated, after approval at a subsequent meeting, to the directors who so request.

ARTICLE 7. THE FINANCIAL STATEMENTS COMMITTEE

7.1. MISSIONS

In accordance with the provisions of the French Commercial Code, the Committee ensures the monitoring of the issues concerning the preparation and verification of the accounting and financial information.

7.1.1. Monitoring of the process of preparation of the financial information

The Committee is tasked with analysing the quarterly, half-yearly and annual financial statements issued by the Company in connection with the closing of financial statements and obtaining further explanations of certain items prior to presentation of the financial statements to the Board of directors.

The Committee shall examine all matters relating to these accounts and financial statements: the choices of accounting principles and policies, provisions, analytical results, prudential standards, profitability indicators, and all other accounting matters that raise methodological issues or are liable to give rise to potential risks.

It makes, as the case may be, recommendations, in order to ensure integrity of the elaboration process of the financial information.

7.1.2. Monitoring of the efficiency of the internal control systems and of risk management concerning accounting and financial matters

The Committee shall analyse, at least twice a year, the summary of the operations and the results of the internal accounting and financial control, as well as those originate from controls on the elaboration process and the processing of accounting, financial and extra-financial information, based on the information communicated to it by the Executive Management. It shall be briefed of incidents revealed by the accounting and financial internal control, reported on the basis of the thresholds and criteria defined by the Board of directors and shall report on its findings to the Board of directors.

It is informed by the Chairman of the Board of directors of any possible failure to implement corrective measures decided within the framework of the accounting and financial internal control system that has been brought to his direct knowledge by the head of periodic control and reports on its findings to the Board of directors.

7.1.3. Monitoring of the statutory auditing of the annual financial statements and of the consolidated financial statements by the Statutory Auditors as well as of the independence of the Statutory Auditors

The Committee shall steer the procedure for selection of the Statutory Auditors, express an opinion on the amount of fees charged for conducting the legal auditing engagements and report to the Board of directors on the outcome of this selection process.

It shall review the Statutory Auditors' audit plan, together with their recommendations and their monitoring.

It shall be notified on a yearly basis of the amount and breakdown of the fees paid by the BNP Paribas Group to the Statutory Auditors and the networks to which they belong, calculated using a model approved by the Committee. It shall ensure that the amount or the portion of the audit firms or the networks' revenues that BNP Paribas represents is not likely to compromise the Statutory Auditors' independence.

Its prior approval shall be required for any engagement entailing total fees of over EUR 1 million (before tax). The Committee shall approve, *a posteriori*, all other engagements, based on submissions from the Finance Department. The Committee shall validate the Finance Department's fast-track approval and control procedure for all "non-audit" engagements entailing fees of over EUR 50,000. The Committee shall receive, on a yearly basis from the Finance Department, a report on all "non-audit" engagements carried out by the networks to which the Group's Statutory Auditors belong.

It receives from the Statutory Auditors a written report on their main observations concerning the weaknesses of internal control and reviews it, as well as most significant recommendations issued in the framework of their mission and reviews it. It takes notes of the most significant statements and recommendations issued by the internal audit in the framework of their missions regarding accounting and financial information.

Each Statutory Auditor shall report on a yearly basis to the Committee on its internal control system for guaranteeing its independence, and shall provide a written statement of its independence in auditing the Group.

The Committee accounts for the statements and conclusions of the *Haut Conseil des Commissaires aux comptes* (H3C) resulting from the controls provided by the H3C in the professional activity of Statutory Auditors.

At least twice a year, the Committee shall devote part of a meeting to a discussion with the team of Statutory Auditors, without any member of the company's Executive Management being present.

The Committee meets in the presence of the team of Statutory Auditors, to review quarterly, half-yearly and annual financial statements.

However, the Statutory Auditors shall not attend all or part of Committee meetings dealing with their fees or their re-appointment.

The Statutory Auditors shall not attend all or part of Committee meetings dealing with specific issues that concern a member of their staff.

Except in the event of exceptional circumstances, the files containing the quarterly, half-yearly and annual results and financial statements shall be sent to Committee members at least three days prior to the Committee meetings.

Where questions of interpretation of accounting principles arise in connection with quarterly, half-yearly and annual results, and involve choices with a significant impact, the Statutory Auditors and FINANCE shall submit, on a quarterly basis, a memorandum to the Committee analysing the nature and significance of the issues at play, presenting the pros and cons of the various possible solutions and explaining the rationale for the choices ultimately made.

They present, at least twice a year, a note on the works on certification of the financial statements. Based on it, the Committee reports to the Board on the results of this mission and on the way this mission has contributed to the integrity of the financial information and on his own role in it.

7.2. CHAIRMAN'S REPORT

The Committee shall review that part of the draft of the Chairman's report on internal control procedures relating to the preparation and processing of accounting and financial information.

7.3. HEARINGS

With regard to all issues falling within its jurisdiction, the Committee may, at its initiative, hear the heads of finances and accounting of the Group, as well as the head of Asset/liability management.

The Committee may ask to hear the head of Finance with regard to any issue within its jurisdiction, for which he may be held liable, or the Company's management may be held liable, or that could call into question the quality of accounting and financial information disclosed by the Company.

ARTICLE 8. THE INTERNAL CONTROL, RISK MANAGEMENT AND COMPLIANCE COMMITTEE

8.1. MISSIONS

8.1.1. Missions concerning the global risk strategy

The Committee advises the Board of directors on the adequacy of the global strategy of the Company and the overall current and future risk appetite. It assists the Board of directors when the latter verifies the implementation of this strategy by the actual managers and by the head of risk management.

For this purpose, the Committee examines the key orientations of the Group's risk policy, including social and environmental orientations, based on measurements of the risk and profitability of the operations reported to it, in accordance with the regulations in force, as well as any specific issues related to these matters and methods.

In the event that a global risk limit is exceeded, a procedure to refer the matter to the Board of directors is provided for: the Executive Management informs the Chairman of the Committee, who can decide to convene the Committee or to request the convening of the Board of directors.

8.1.2. Missions concerning the examination of the prices of the products and services proposed to customers

In the framework of its mission and according to the terms it shall define, the Committee examines whether the prices of the products and services proposed to customers are compatible with the risk strategy. Where prices do not properly reflect the risks, it presents to the Board of directors an action plan to remedy this.

8.1.3. Missions concerning remuneration

Without prejudice to the missions of the remunerations Committee, the Risk committee examines whether the incentives provided for by the policy and the remuneration practices of the Company are compatible with its situation with respect to the risks to which it is exposed, its capital, its liquidity and the probability and the spreading over time of the expected profits.

To carry out this mission, the Chairman of the Committee shall attend the Remunerations Committee's meeting and presents to it the position upheld.

8.1.4. Missions concerning internal control and compliance

The Committee also reviews all compliance-related issues, particularly those in the areas of reputation risk or professional ethics.

The Committee analyses the risk measurement and monitoring report. Twice a year it examines the internal control operations and findings (excluding accounting and financial internal control, which is the responsibility of the Financial Statements Committee) based on the information provided to it by Executive Management and the reports presented to it by the heads of permanent control, compliance and periodic controls. It reviews the Company's exchanges of correspondence with the Secretariat General of the Prudential Control and Resolution Authority (*Autorité de Contrôle Prudentiel et de Résolution* – ACPR).

The Committee is briefed on incidents revealed by internal control that are reported on the basis of the thresholds and criteria defined by the Board of directors and reports on its findings to the Board of directors.

It analyses the status of recommendations made by the General Inspection unit that were not implemented. It is informed by the Chairman of the Board of directors of any possible failure to implement corrective measures decided within the framework of the internal control, of which it would have been informed directly by the head of periodic control and reports on its findings to the Board of directors.

8.2. HEARINGS

It proceeds with the hearing, excluding the presence of the Executive Management, of the heads of the Group control functions (General Inspection, Compliance, Risk and Legal).

It presents the Board of directors with its assessment concerning the methods and procedures employed.

It expresses its opinion concerning the way these functions are organised within the Group and is kept informed of their work programme.

8.3. ACCESS TO THE INFORMATION

The Committee has all the information about the situation of the Company with respect to risks. It may, if this is necessary, use the services of the head of risk management or of outside experts.

8.4. MEETINGS COMMON TO THE FINANCIAL STATEMENTS COMMITTEE AND THE INTERNAL CONTROL, RISK MANAGEMENT AND COMPLIANCE COMMITTEE

The financial statements Committee and the internal control, risk management and compliance Committee shall meet at the request of the Chairman of the Internal control, risk management and compliance Committee, or at the request of the Chairman of the financial statements Committee or at the request of the Chairman of the Board of directors.

In that context, the members of these Committees:

- shall be briefed of the mission plan of the General Inspection and of the audit plan of the Statutory Auditors and shall prepare the work of the Board of directors in assessing the risk policies and management systems;
- deal with common subjects concerning the risks and financial impacts policy (including provisioning). They carry out, in particular, a systematic review of the risks that can in the future have a significant impact on the financial statements.

This meeting shall be chaired by the Chairman of the financial statements Committee.

ARTICLE 9. THE CORPORATE GOVERNANCE, ETHICS, NOMINATIONS AND CSR COMMITTEE

9.1. MISSIONS CONCERNING CORPORATE GOVERNANCE

The Committee is tasked with monitoring corporate governance issues. Its role is to help the Board of directors to adapt corporate governance practices within BNP Paribas and to assess its functioning.

It ensures the follows up on a regular basis of the evolution in the governance disciplines at the global, European and national levels. At least once a year, it presents a summary thereon to the Board of directors. It selects measures that are suitable for the Group and which are likely to bring its procedures, organisation and conduct in line with best practice in this area.

It examines the draft report on corporate governance and all other documents required by applicable laws and regulations.

The Committee is in charge of the follow up of questions related to the social and environmental responsibility ("CSR"). For this purpose, it handles more specifically the Group's contribution to sustainable economic development, in particular by an ethical financing of the economy, by promoting the development and the commitment of the employees, by the protection of the environment and the fight against climate change, as well as the positive impact of the Group in the society.

9.2. CODE OF CONDUCT

The Committee carries out regular monitoring of the update of BNP Paribas Group's Code of conduct.

9.3. MISSIONS CONCERNING THE IDENTIFICATION OF, SELECTION OF, AND SUCCESSION PLAN FOR DIRECTORS, COMMITTEE MEMBERS, AND NON-VOTING DIRECTORS (CENSEURS)

For the identification of, selection of, and succession plan for the directors, the Committee applies the principles and procedure described in the Policy on the suitability of Members of the management body and Key function holders. The Committee regularly reviews this policy and proposes any amendments it deems advisable to the Board of directors.

The Committee sets an objective to achieve with respect to gender balance on the Board of directors. It draws up a policy aimed at achieving this objective. This objective and this policy, once set, are approved by the Board of directors.

As the case may be, the Committee proposes to the Board of directors the appointment of the non-voting directors.

9.4. MISSIONS CONCERNING THE ASSESSMENT OF THE BOARD OF DIRECTORS

The Committee assesses periodically, and at least once a year, the balance and diversity of the Board in compliance with the Policy on the suitability of Members of the management body and Key function holders.

Furthermore, an assessment of the Board of directors is made by a firm of external expert advisors every three years.

9.5. MISSIONS CONCERNING THE SELECTION OF, APPOINTMENT OF, AND SUCCESSION PLAN FOR THE CHAIRMAN, MEMBERS OF EXECUTIVE MANAGEMENT, AND KEY FUNCTION HOLDERS

The Committee periodically examines the Policy on the suitability of Members of the management body and Key function holders regarding the selection of, appointment of, and succession plan for the executive officers, the Chief Operating Officer(s), the Chairman, and the Key function holders as defined in this Policy, and makes recommendations in the matter.

The Committee contributes to the selection and appointment of, as well as the establishment of succession plans for, the Chairman and members of the Executive Management, pursuant to the Policy on the suitability of Members of the management body and Key function holders.

With regard to the key function holders, it ensures that the Policy on the suitability of Members of the Management body and Key function holders is applied by Executive Management.

9.6. MISSIONS CONCERNING THE ASSESSMENT OF THE CHAIRMAN, CHIEF EXECUTIVE OFFICER, AND CHIEF OPERATING OFFICER(S)

The Committee assesses the action of the Chairman.

It makes an assessment of the performance of the Chief Executive Officer and of the Chief Operating Officer(s) in the light of the strategic directions of the business established by the Board of directors and taking into consideration their capacities for anticipation, decision, organisation and exemplarity.

9.7. MISSIONS CONCERNING THE INDEPENDENCE OF THE DIRECTORS

The Committee is tasked with assessing the independence of the directors, within the meaning of the Afep-Medef Code, and reporting its findings to the Board of directors.

9.8. MISSIONS CONCERNING THE GENERAL BALANCE OF THE BOARD OF DIRECTORS

The Committee ensures that the Board of directors is not dominated by one person or, a small group of persons in a manner that is detrimental to the interests of the Company. For this purpose, it applies the Policy on the suitability of Members of the management body and Key function holders.

ARTICLE 10. THE REMUNERATION COMMITTEE

The Committee prepares the decisions that the Board of directors approves concerning remuneration, in particular that which has an effect on risk and the management of risks.

The Committee makes an annual examination:

- of the principles of the remuneration policy of the Company;
- of the remuneration, allowances and benefits of any kind granted to the corporate officers of the Company;
- of the remuneration policies of the categories of staff, including the executive managers, risk takers, and staff engaged in control functions and any employee, who given his overall income, is in the same remuneration bracket as those whose professional activities have a material impact on the risk profile of the Company or of the Group.

The Committee directly controls the remuneration of the head of RISK and of the head of Compliance.

Within the framework of the missions described above, the Committee prepares the work of the Board of directors on the principles of the remuneration policies, in particular concerning Group staff whose professional activities have a material impact on the Group's risk profile, in accordance with the regulations in force.

It is tasked with studying all issues related to the personal status of the corporate officers, and in particular the remuneration, the amount of retirement benefits and the allotment of subscription or purchase options to the Company's shares, as well as the provisions governing the departure of the members of the Company's management or representational bodies.

It examines the conditions, the amount and the distribution of the subscription or purchase stock option plans. Similarly, it examines the conditions for the allotment of free shares.

With the Chairman, it is also within its remit to assist the Chief Executive Officer with any matter relating to the remuneration of senior executives that the latter might submit to it.

GUIDELINES ON THE ASSESSMENT OF THE SUITABILITY OF MEMBERS OF THE MANAGEMENT BODY AND KEY FUNCTION HOLDERS

I. Background and definitions

a. Background

The purpose of the Policy on the suitability of Members of the management body and Key function holders is, while complying with the legal and regulatory provisions applicable to the Company, to specify and detail the procedures for implementing the provisions of the Internal rules and of the regulations applicable to BNP Paribas in the French Monetary and Financial Code (hereinafter "**CoMoFi**"), the European Banking Authority ("**EBA**") Guidelines on the assessment of the suitability of members of the management body and key function holders (the "**Fit and Proper Guidelines**") published on 26 September 2017, and on Internal Governance, from the comply or explain process (defined below).

Pursuant to these provisions, these guidelines cover the following topics:

II. Identification of, selection of, and succession plan for Members of the management body and Key function holders:

- **a.** Identification of, selection of, and succession plan for directors,
- **b.** Identification of, selection of, and succession plan for the Chief Executive Officer and Chief Operating Officer(s),
- **c.** Identification of, selection of, and succession plan for Key function holders;

III. Independence of mind and management of conflicts of interest of the Members of the management body:

- **a.** General principles,
- **b.** Cases of conflicts of interests,
- **c.** Management of conflicts of interests;

IV. Compliance with the rules on limitation of directorships and on availability of the Members of the management body:

- **a.** Compliance with rules when appointing a Member of the management body,
- **b.** Compliance with rules while holding directorship as a Member of the management body;

V. Good repute, honesty, and integrity of the Members of the management body;

VI. Diversity of the Members of the management body and collective competence of the Board of directors;

VII. Induction and training of the Members of the management body.

These guidelines are approved by the Board of directors. Updates shall also be submitted for approval to the Board of directors.

b. Definitions

Members of the management body means the directors, the Chief Executive Officer, and the Chief Operating Officer(s).

Key function holders means, for the purposes of the Fit and Proper Guidelines, the Chief Financial Officer, the Head of Compliance, the Head of RISK and the Head of the General Inspection, the Head of Legal, the Head of Human Resources, and the individuals to whom the Company has decided to confer the title of Deputy Chief Operating Officers.

Fit and Proper means the assessment conducted by BNP Paribas on the collective suitability of the Board and of the relevant individuals with regard to the following criteria:

- knowledge, skills and experience;
- good repute, honesty, and integrity;
- independence of mind;
- compliance with the rules on limitation of directorships and on availability.

Comply or explain process means the procedure in the Single Supervisory Mechanism by virtue of which the European Central Bank ("**ECB**") and the competent national authorities announce their intention to comply, fully, partially, or not at all, with the guidelines issued by that authority.

Company means BNP Paribas.

CGEN means the Governance, Ethics, Nominations and CSR Committee of BNP Paribas.

SCA means the Secretariat of the Board of directors of BNP Paribas.

II. Identification of, selection of, and succession plan for Members of the management body and Key function holders

a. Identification of, selection of, and succession plan for directors

The CGEN is tasked with the identification of the persons that are likely to be appointed as directors, regardless of their role on the Board of directors, to establish and to maintain at all times a list of these persons, which will be periodically monitored by the CGEN, without precisely determining the circumstances requiring their nomination to the Board of directors.

Identification by the CGEN of the persons likely to be appointed as directors

The CGEN shall identify and recommend to the Board of directors candidates suitable for the non-executive directorship of director, with a view to proposing their candidacy to the General Meeting. In the determination of the potential candidates, the CGEN assesses the balance of skills, experience, diversity, as well as the integrity and the capacity of understanding the stakes and the risks, both personal and collective, of the members of the Board. It ensures, furthermore, that the candidates are able to act objectively, critically and independently, notably with respect to other directorships they hold, that they have the courage necessary to express their thoughts and their judgements, sufficient availability to have a strong commitment in their duties and the objectivity indispensable for their directorship and, lastly, the desire to protect the interests of the Company and ensure its proper running.

The CGEN specifies the missions and the necessary qualifications for the duties to be carried out within the Board of directors and calculates the time to be devoted to such duties.

For the purposes of identifying the candidate, the CGEN,

- on the one hand, mandates, if it wishes so, one or several specialised agencies in the research for independent directors with the meaning of the provisions provided in Afep-Medef Code; this or these specialised agencies are selected further to a tender organised in coordination with the SCA;
- on the other hand gathers inputs on this from other Board members.

Upon receipt of a proposal, the CGEN conducts a careful examination of the provisions of these guidelines as well as on the following criteria based on both personal and collective skills:

- knowledge and skill in requested areas, based on experience and the ability to understand the issues and risks of key activities for the Bank, including social and environmental issues, enabling directors to make informed and effective decisions;
- courage, in particular to express opinions and make judgments, enabling directors to remain objective and independent;
- availability, *i.e.* sufficient time for the director to dedicate to his directorship and related training, and the assiduity, which allow the necessary hindsight and promote the director's commitment and sense of responsibility regarding the exercise of their directorship;
- loyalty, which fosters the director's commitment to the Company and to their duties within the Board, which collectively represents the shareholders;
- director's proper understanding of the Company's culture and ethics;
- good repute and propriety: a person should not be considered of good repute and meeting the propriety criterion if his or her personal or business conduct gives rise to any material doubt about his or her ability to ensure his or her directorship as independent director.

The CGEN ensures the regular updating of the list of persons that are likely to be selected, and, once a year, reports to the Board the work performed in order to identify the persons that are likely to be appointed directors so that the Board can deliberate on it.

As appropriate, the CGEN shall identify those individuals likely to be selected for the non-executive directorship of Chairman in consideration of the criteria set out above.

Selection by the Board of directors of the persons likely to become members of the Board

When the Board has to decide the appointment of a new member, the CGEN decides upon the submission of the candidacy to the Board in order, if the Board decides so, to propose such candidacy to the General Meeting. First, it shall communicate to the Chairman of the Board the name of the person who is likely to be appointed setting out the reasons for its proposal. The Chairman of the Board of directors contacts the relevant person and, in the case of an agreement with this person, asked the SCA to review the situation of the person in accordance with the above provisions. The Chairman of the CGEN and the Chairman of the Board met potential candidates.

A candidate for the non-executive directorship of Chairman of the Board of directors is submitted to the Chairman of CGEN so that this latter may contact the relevant candidate.

If the review and interview regarding the duties of both director and Chairman of the Board of directors are deemed to be satisfactory, the CGEN can then propose to the Board of directors to adopt the proposal for the submission of the candidacy.

The SCA can ask the candidates for any document required for its review, which it will retain pursuant to legal and regulatory provisions on personal data.

For specialised committees, the CGEN makes recommendations to the Board of directors on the appointment of the members in cooperation with the Chairman of the relevant Committee, and of the Chairmen of the Committees when they are to be renewed.

Succession plan for directors and review of the composition of the Board

The CGEN is responsible for examining the provisions allowing for the succession of the directors as well as, where applicable, the Chairman.

Once a year, the SCA, under the responsibility of the CGEN, reviews the composition of the Board of directors in accordance with the provisions relating to the identification of persons likely to become members of the Board of directors. The CGEN presents to the Board of directors the outcome of such review, which is subject to Board's deliberation.

b. Identification of, selection of, and succession plan for the Chief Executive Officer and Chief Operating Officer(s)

The Board of directors appoints the Chief Executive Officer and, on the recommendation of the latter, the Chief Operating Officer(s), and sets any limits to their powers.

For this purpose, acting jointly with the Chairman, the CGEN puts forward recommendations for the selection of the Chief Executive Officer for consideration by the Board, and, acting on recommendation of the Chief Executive Officer, it puts forward recommendations for the selection of the Chief Operating Officer(s). The CGEN ensures, at the time of identifying and putting forward recommendations for the Chief Operating Officer position(s), upon proposal from the Chief Executive Officer and where applicable with the support of the Company's Human Resources, that there is a gender balance and guarantees the presence of at least one woman and one man until the end of the selection process.

To identify the candidate, the CGEN conducts a careful examination of his or her candidacy in consideration of the provisions of this policy as well as the following criteria:

- knowledge and skill in requested areas, based on experience and ability to understand the issues and risks of key activities for the Bank, including social and environmental issues, enabling them to make informed and effective decisions;
- courage, in particular to express opinions and make judgements, enabling directors to remain objective and independent;
- availability, *i.e.* the sufficient time which the Chief Executive Officer and Chief Operating Officer(s) must dedicate to their duties and to the relevant training;
- loyalty, which fosters the commitment of the Chief Executive Officer and the Chief Operating Officer(s) to the Company and its shareholders;
- good repute and propriety: a person shall not be considered of good repute or meeting the propriety criterion if his or her personal or business conduct gives rise to any material doubt about his or her suitability as Chief Executive Officer or Chief Operating Officer, as the case may be.

The SCA can ask the candidate or the Company, as the case may be, for any document required for its review, which it shall retain pursuant to the legal and regulatory provisions on personal data.

It is also responsible for examining the provisions allowing the succession of the Chief Executive Officer and Chief Operating Officer(s).

c. Identification and appointment of the Key function holders

The CGEN ensures that in the identification and appointment of the Key function holders by Executive Management, with the support of the Company's Human Resources, as the case may be, the following are considered:

- skills, qualification, and experience;
- and good repute, honesty, and integrity.

III. Independence of mind and management of conflicts of interest of the Members of the management body

In consideration of the so-called "related-party agreements" regime in articles L.225-38 *et seq.* of the French Commercial Code, provisions regarding independence of mind and conflicts of interest set out in section 9 of the Fit and Proper Guidelines and Principle 3 of the Guidelines on Corporate governance principles for banks, published in July 2015 by the Basel Committee on Banking Supervision, and with the objective to embrace the best practices observed in the governance area, the aim of this section is to (i) recall the general principles applied to ensure the independence of mind of every Member of the management body, (ii) define the situations of conflicts of interest to which directors may face in light of the various activities that the Group conducts and which could be in competition with the interests of the concerned director, shall it be directly or indirectly, and (iii) provide details, in case such conflict of interest occurs, concerning the necessary measures to be adopted in order to take the situation into account and handle it in an appropriate manner.

a. General principles

Every Member of the management body shall at all times maintain his or her independence of mind, analysis, assessment, decision, and action so as to be able to issue opinions and make decisions in an informed, judicious and objective manner. For this purpose, the Member of the management body shall respect both the legal and regulatory provisions applicable to conflicts of interest - specifically the so-called "related-party" agreements - and the provisions below on the measures to be adopted in recognizing conflicts of interest and managing them appropriately.

More specifically, the Members of the management body shall refuse any benefit or service liable to compromise their independence, and undertake to avoid any conflict of interest (as described below).

Each member of the Board of directors shall freely express his or her positions, possibly minority positions, about the subjects discussed in the meetings of the Board or specialised committee.

It is recalled that any conflict of interest may question the fact that a director qualifies as an independent director according to the provisions of the Afep-Medef Code.

b. Cases of conflicts of interests

Besides the so-called "conventions réglementées" regime provided for by articles L.225-38 and *subseq.* of the French Commercial Code, the following situations may give rise to conflicts of interest:

- **a)** each agreement entered into directly, or through an intermediary person[(1)], between a company that BNP Paribas controls within the meaning of article L.233-16 of the French Commercial Code and one of the Members of the Company's management body;
- **b)** each agreement to which one of the Members of the Company's management body is indirectly interested, meaning that without being directly party to the said agreement entered into by one of the companies controlled by the Company within the meaning of article L.233-16 of the French Commercial Code, the Member of the management body benefits in a way or another from the agreement;
- **c)** each agreement entered into between one of the companies controlled by the Company, within the meaning of article L.233-16 of the French Commercial Code, and a company owned by a Member of the Company's management body or of which such director is also an owner, general partner, manager, director, Member of the Supervisory Board or, generally, in a senior manager of this company;
- **d)** each situation where Members of the management body are or might be, in relation with the exercise of his or her non-executive directorship, the recipient of privileged information (i) concerning a company in which he or she is an executive director within the meaning of c) or in which he or she exercises a function or holds interests whatever, or (ii) concerning the Company or one of the companies under its control within the meaning of article L.233-16 of the French Commercial Code which may be interests concerning the activity of a company in which he or she is an executive director within the meaning of c) or in which he or she exercises a function or holds interests whatever they may be;
- **e)** each situation where the Member of the management body could take part to a Board meeting to which would be interested any person with whom he or she has family or professional links, or tight relations;
- **f)** the undertaking of a new directorship whether in a listed or unlisted entity, French or foreign, not belonging to a group of which he is a manager, or any participation in the specialised Committee of a corporate body or any other new directorship[(2)];
- **g)** each currently valid commitment made under directorship previously held in France or abroad (e.g. a non-competition clause);
- **h)** more generally, each situation that may constitute a conflict of interest between the Member of the management body and the Company or one of its subsidiaries within the meaning of article L.233-16 of the French Commercial Code.

c. Management of conflicts of interests

The assessment of current agreements is subject to a separate procedure by the Board of directors entitled "Procedure for current agreements entered into under normal conditions".

Situations covered by the "related-party agreements" regime

The Members of the management body acknowledge having read and understood the related-party agreement regime and the obligations resulting from such regime.

Other situations

If one of the situations described in a) through e) or g) or h) above should occur, the Member of the management body shall immediately inform the Chairman of the Board of directors, who shall in turn inform the CGEN so that the latter, based on the analysis of the presented situation, may give an opinion which may consist of one or more measures described in the following paragraph. This opinion is then submitted to the Board of directors and, if followed by the said Board, is notified by the Chairman of the Board, to the concerned director. The decision of the Board of directors will be included in the minutes of the meeting.

More specifically, if one of the situations described in a) through e) or g) or h) above should occur during a Board of directors meeting or one of its Committees, and without prejudice to the application of the preceding paragraph, the Board of directors or the Committee, as the case may be, shall immediately determine the measures to be taken, which may take different forms including the fact the concerned director or Committee would not participate to the debate or the votes, would not receive the information on the issue that gives or may give rise to a conflict of interest, or even would have to leave the meeting of the Board or the Committee during the discussion of the concerned issue. The minutes of the Board or the Committee includes the measures adopted.

If the situation covered in f) above should occur, he or she shall inform the Chairman of the Board of directors of his or her intention to accept (i) a new directorship, whether in a listed or unlisted, French or foreign entity that does not belong to a group of which he or she is an executive director, or (ii) each participation in the specialised committees of a corporate body, or (iii) any other new directorship, such that the Board of directors, on the recommendation of the CGEN, may decide on the compatibility of such an appointment with the non-executive directorship of a Member of the management body in the Company. If necessary, the provisions on limitation of directorships and on the availability of Members of the management body set forth below shall be applied mutatis mutandis.

In any case, if the Board considers that the relevant Member of the management body is no longer able to perform his or her duties therein because of a conflict of interest, he or she shall resign.

More generally, in the event of a breach of obligations with respect to conflicts of interest by a Member of the management body, the Chairman of the Board of directors shall take all legal measures required to remedy it. He or she may, furthermore, keep the relevant regulators informed of such acts.

IV. Compliance with rules on limitation of directorships and on availability of the Members of the management body

The Member of the management body complies with legal and regulatory provisions, specifically those set out in articles L.511-52 and R.511-17 of the CoMoFi (the "**CoMoFi Provisions**") and in the Fit and Proper Guidelines, which are applicable to him or her or applicable to the Company in matters of limitation of directorships and of availability as well as those in the Afep-Medef Corporate Governance Code.

(1) The interposition of an intermediary corresponds to a situation in which the Member of the management body is the ultimate real beneficiary of the agreement between one of the companies that BNP Paribas controls and the co-contracting party of that controlled company.

(2) This includes those of a political nature.

a. Compliance with rules when appointing a Member of the management body

Once a candidate is chosen by the CGEN and prior to submitting it to the Board of directors, the SCA, under the responsibility of the Chairman of the Board of directors:

a) contacts the candidate in order to request the list of directorships as well as any other functions he or she may hold, and how much time is spent on them each year;

b) ensures that the candidate is in compliance with the Provisions of the CoMoFi regarding the number of directorships;

c) ensures that the candidate has the time required for the duties and training he or she would perform for the directorship in question;

d) and checks that these directorships and other functions are suitable with the position of a Member of the management body, in accordance with the above provisions on independence of mind and management of conflicts of interest.

The candidate shall certify that the list of directorships and functions is complete and provide on request of the SCA any document (company bylaws, extracts from trade registers or equivalent, certificate, statement, etc). that the SCA deems useful to have.

The SCA then analyses the directorships declared by the candidate so as to ensure that the Provisions of the CoMoFi are complied with. It records the written documents on which the analysis and the conclusions were based, in accordance with personal data laws and regulations. As part of this review, the SCA may proceed to the researches he deems useful.

At the outcome of the SCA's review,

a) either the candidate is in compliance with the Provisions of the CoMoFi and has the time required to serve as a director: the SCA shall report to the Chairman of the Board of directors, who shall inform the Chairman of the CGEN. The CGEN shall then propose the candidate to the Board of directors which shall take a decision on his appointment or his co-option, as the case may be;

b) or the candidate is not in compliance with the Provisions of the CoMoFi or does not have the time required to serve as a director: the SCA shall inform the Chairman of the Board, who shall in turn notify the Chairman of the CGEN, so that the measures for remedying this situation can be reviewed with the candidate. If the candidate is willing to make the necessary arrangements prior to his nomination or his co-option, the SCA states this in minutes which will then be submitted to the Board of directors which will decide, his nomination or his co-option, as the case may be.

If the candidate is not willing or cannot implement the necessary steps, the SCA established minutes to the attention of the CGEN, which acts the end of the selection process.

b. Compliance with rules while holding directorship as a Member of the management body

At all times, the Members of the management body shall comply with the rules on limitation of directorships and dedicate the time and effort required to carrying out their duties and responsibilities. They accept the discipline involved in working together in the respect of each other's opinions and they exercise their sense of responsibilities towards shareholders and the other stakeholders of the Group.

In addition, directors shall actively and regularly participate in meetings of the Board of directors and of the committees, and shall attend the Annual General Shareholders' Meeting. Furthermore, the directors representing employees, are given preparation time determined by the Board, in accordance with the laws in force.

To this end, every Member of the management body shall inform the Chairman of the Board of directors of his or her intention to accept (i) a new directorship, whether in a listed or unlisted, French or foreign entity, not belonging to a group of which he or she is an executive officer, or (ii) any participation in the specialised committees of a corporate body, or (iii) any new directorship, in France or abroad, such that the Board of directors, on the recommendation of the Corporate Governance, Ethics, Nominations and CSR Committee may decide on the compatibility of such an appointment with the non-executive directorship in the Company.

In this case, the SCA shall follow the analysis and verification procedure for the appointment of a Member of the management body.

At the end of the analysis referred to above, one of two situations may arise:

a) either the Member of the management body accepting this new directorship complies with the Provisions of the CoMoFi, in which case the SCA informs the Chairman of the Board of directors, who in turn informs the CGEN. The CGEN then ensures that this new directorship complies specifically with the conflicts of interest rules on set out above;

b) or the Member of the management body, by accepting this new directorship, is no longer in compliance with the Provisions of the CoMoFi, in which case the SCA shall inform the Chairman of the Board of directors, who shall report it to the Chairman of the CGEN, so that the measures for complying with the CoMoFi Provisions can be reviewed with the Member of the management body.

Whatever the case, if he or she no longer has the time to perform his or her duties, the SCA shall inform the Chairman of the Board of directors, who shall report it to the Chairman of the CGEN so that the measures for remedying the situation can be reviewed with the Member of the management body.

If the Member of the management body is willing to maintain his or her directorship in the Company, he or she shall either not accept the proposed directorship, or resign from a directorship he or she already holds. The SCA shall include this in minutes that shall then be submitted to the Board of directors.

If the Member of the management body decides to accept this new directorship without resigning from any directorship he or she already holds, the Member of the management body shall tender his or her letter of resignation as Member of the management body. The SCA shall mention this in a report to be addressed to the CGEN which acts this resignation, with the effective date to be decided on by the Board of directors. Any Member of the management body who considers him- or herself unable to continue on the Board of directors, or on the Committees of which he or she is a member shall resign.

At least once a year, the SCA asks the Members of the management body to update the form known as the "EBA Form", under which are listed all the directorships held by each Member of the management body, and to which is appended their availability table.

This update shall enable the SCA to ensure that all Members of the management body are in compliance with the Provisions of the CoMoFi and available on an ongoing basis.

V. Good repute, honesty, and integrity of the Members of the management body

At all times, the Members of the management body shall meet the requirements of good repute and show honesty and integrity.

Candidates and Members of the management body undertake to immediately notify the Chairman of the Board of directors and the SCA of:

- **a)** any conviction (including on appeal, in criminal, civil, or administrative proceedings);
- **b)** any disciplinary measure;
- **c)** any prior refusal of validation by competent banking or financial authorities in France or abroad;
- **d)** any refusal, withdrawal, revocation, or prohibition on management of any registration, authorisation, membership, or licence to conduct a business or profession;
- **e)** any sanction by public authorities or professional organisations, or investigations or enforcement proceedings ongoing in France or abroad;
- **f)** any dismissal for professional misconduct or any dismissal from a directorship he or she may be the subject;
- **g)** any situation mentioned in a) through f) above concerning a company of which he or she is an executive officer, shareholder, or partner.

The SCA shall retain the written evidence and documents on which the analysis and the conclusions of the CGEN were based, in accordance with personal data laws and regulations. As part of this review, and at the request of the Chairman of the Board of directors, or, as applicable, the Chairman of the CGEN, the SCA may carry out any searches it deems useful, including questioning the relevant person.

If the Chairman of the Board of directors, or, as applicable, the Chairman of the CGEN, is notified of the occurrence of one of the aforementioned cases, he or she shall inform the CGEN so that this latter, based on the analysis of the reported situation, can issue an opinion as to the good repute of the Member of the management body and decide whether to ask him or her to resign. This opinion is then submitted to the Board of directors and if, followed by the said Board, is notified by the Chairman of the Board, to the concerned director. The decision of the Board of directors will be included in the minutes of the meeting.

In addition, every Member of the management board undertakes to act with loyalty and integrity toward the Members of the management board, the shareholders, and the Company alike. Failing this, the Chairman of the Board of directors, or, as applicable, the Chairman of the CGEN, may refer the matter to the CGEN so that the latter can issue an opinion as to the loyalty and integrity of the Member of the management body and may decide to ask him or her to resign.

VI. Diversity of the Members of the management body and collective competence of the Board of directors

The CGEN shall set the objectives to achieve with respect to gender balance on the Board of directors, age diversity, professional qualifications and experience, and nationality among the Members of the management body, so as to ensure that at all times they have the skills necessary to understand the risks, issues, including social and environmental issues, and potential developments in the Company.

For this purpose, the CGEN periodically assesses and at least once a year, the structure, the size, the composition and the effectiveness of the Board of directors with respect to the missions with which it is entrusted, and makes any useful recommendations to the Board.

VII. Induction and training of the Members of the management body

The Members of the Company's management body shall possess, both individually and collectively, the expertise, experience, skills, understanding, and personal qualities necessary, specifically in terms of professionalism and integrity, to properly perform their duties in connection with each of the significant activities of the Company, guaranteeing effective governance and supervision.

The Members of the management body shall maintain their knowledge in the following fields: finance and banking, risk management, regulations applicable to the Company, and, more broadly, any field related to the development and strategy of the Company.

The Company shall dedicate the human and financial resources required for the training of the Members of the management body. With this aim, annual training courses are administered by the managers of the topics presented, and strategy seminars are held.

In addition to the training courses mentioned above, any director may request additional training. For this purpose, he or she shall initiate a dialogue with the Chairman and the SCA, who shall determine the arrangements for the requested training.

The directors representing employees are given time dedicated to training determined by the Board, in accordance with the laws in force. At the end of the training, the training centre chosen by the Board must issue a certificate of regular attendance, which the director representing employees must give to the Secretary of the Board.

The Board of directors shall ensure that new directors meet with the Key function holders.

DESCRIPTION OF THE PROCEDURE FOR CURRENT AGREEMENTS ENTERED INTO UNDER NORMAL CONDITIONS

Pursuant to article L.225-39 of the French Commercial Code, the Board of Directors has put in place a procedure to evaluate on a regular basis whether agreements covering current operations and agreed on an arm's length basis (so-called "free" agreements) meet these conditions.

This procedure covers agreements concluded between BNP Paribas and the directors, the Chairman, the Chief Executive Officer and the Chief Operating Officer or natural persons closely associated with them, their holding companies and legal entities in which they have an interest (directorship or equity holding).

The procedure has two components:

- Agreements between BNP Paribas and the natural persons or holding companies mentioned above:

  The interested parties must provide the Bank, on an ongoing basis, with the list of agreements concluded between BNP Paribas and the natural persons or holding companies mentioned above. The Compliance function ensures that these agreements do cover current operations and are concluded under normal conditions and prepares a report that it sends to the Secretary of the Board of directors.

- Agreements between BNP Paribas and legal entities (other than holding companies) mentioned above.

  This procedure relies upon existing policies (such as the "Code of conduct" or "Client Interests Protection Policy") and also provides for:

  - the declaration by the corporate officers of the legal entities with which they are associated;
  - the verification by the Bank of any business relationships between each of these legal entities;
  - in-depth monitoring of agreements identified using a risk-based approach.

A report is prepared for each of these elements and submitted every year to the CGEN which informs the Board of directors.

2.1.3 REMUNERATION AND BENEFITS AWARDED TO THE CORPORATE OFFICERS

The provisions of the French Commercial Code, as amended by ordinance No. 2019-1234 of 27 November 2019, on the remuneration of the corporate officers of listed companies provide for obtaining the *ex ante* approval every year by the Annual General Meeting on remuneration policy for corporate officers. The remuneration policy for corporate officers at BNP Paribas is presented below on pages 72 to 77.

The remuneration of these same corporate officers is also subject to the *ex post* vote of the Annual General Meeting relating to the information on the remuneration referred to in article L.225-37-3 I of the French Commercial Code (this information is set out below on pages 78 *et seq.*). When the Annual General Meeting does not approve these items, the Board of directors submits an amended remuneration policy, taking into account the shareholders' vote, for the approval of the next Annual General Meeting. The payment of directors' remuneration for the current year is suspended until the amended remuneration policy is approved. When the payment is reinstated, payments are backdated to the last Annual General Meeting.

Lastly, the remuneration of each executive corporate officer is subject to a second *ex post* vote on the total remuneration or benefits in kind paid during the previous year or awarded in respect of the same year (the information relating to this remuneration is outlined in tables 1 a and b, 2 a and b and 3 a and b on pages 79 and *seq.*). The variable components of remuneration in respect of the previous year can only be paid after they have been approved by the Annual General Meeting on the basis of this second vote.

REMUNERATION POLICY FOR CORPORATE OFFICERS SUBMITTED FOR SHAREHOLDERS' *EX ANTE* APPROVAL, IN ACCORDANCE WITH ARTICLE L.225-37-2 OF THE FRENCH COMMERCIAL CODE, AT THE ANNUAL GENERAL MEETING ON 19 MAY 2020

In this report, the Board of directors provides details of the fixed and variable components of total remuneration and benefits in kind, attributable to the directors, the Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer for their corporate offices within BNP Paribas (SA), over a three-year period.

The elements of the remuneration policy presented below are the subject of resolutions submitted for the approval of the Annual General Meeting of Shareholders voting under the quorum and majority conditions required for Ordinary Annual General Meetings. If the Annual General Meeting does not approve these resolutions, the previous remuneration policy, which has already been approved by the Annual General Meeting of 23 May 2019, will continue to apply. In this case, the Board of directors will submit for the approval of the next Annual General Meeting a draft resolution outlining an amended remuneration policy, indicating how the shareholders' vote was taken into account and, where appropriate, the opinions stated during the Annual General Meeting.

The remuneration policy for the corporate officers complies with applicable legislation and regulations, the Afep-Medef Code and the BNP Paribas Responsibility Charter. The policy, as detailed below (in particular the performance criteria), is aligned with the Company's corporate interest, contributes to the commercial strategy as well as the sustainability of the Company and takes into consideration the compensation and employment conditions of the employees within the Company.

Without prejudice to the powers of the Annual General Meeting in this respect, the determination of the remuneration of corporate officers is the responsibility of the Board of directors and is based on proposals from the Remuneration Committee, which drafts the decisions which the Board of directors approves regarding remuneration. In particular, the Remuneration Committee annually reviews the remuneration, compensation and benefits in kind granted to the Company's corporate officers. The Committee is made up of two independent members who have experience of remuneration systems and market practices in this area and includes a director elected by employees.

Measures aimed at avoiding and managing conflicts of interest are established in the Internal rules of the Board of directors as well as the policy on the suitability of Members of the management body and Key function holders. Executive corporate officers are not present during the discussions of the Board of directors and the Remuneration Committee regarding their own compensation.

The remuneration of executive corporate officers takes account, in its principles, of the following objectives:

- alignment with the Bank's social interest and with that of its shareholders:
  - consistency with a medium to long-term outlook, especially in terms of the growth of the Bank's value, good risk management and the relative performance of its share,
  - integration of extra-financial assessment criteria,
  - consideration of CSR aspects in determining remuneration (in particular the CSR objectives considered for certain employees),
  - guaranteeing sufficient variability in the amounts allocated to reflect changes in the Bank's results without weighing too heavily on fixed expenses;
- the transparency of compensation:
  - all components (fixed, annual variable, multi-annual variable) are used in the overall assessment of the remuneration,
  - balance between the components of remuneration, which must contribute to the general interest of the Bank and reflect best market practices and legal and regulatory constraints,
  - the rules must be stable, strict and intelligible;
- remuneration that is sufficiently attractive to facilitate the selection of profiles that are particularly competent in the Group's business areas.

I. Directors' remuneration

In accordance with the law, the global amount of directors' remuneration is set by the Shareholders' Annual General Meeting.

The individual amount of directors' remuneration is determined by the Board of directors pursuant to a proposal of the Remuneration Committee. It comprises a fixed and a predominantly variable portion based on actual participation in meetings, regardless of the means. Directors residing abroad receive an increased amount, except where they may participate in meetings of the Board of directors by videoconference or telecommunications means. Additional remuneration is paid for actual participation in Committees. Committee members receive this additional remuneration for their participation in each different Committee.

At the end of the year, the Remuneration Committee examines the allocation of directors' remuneration and the amount paid to each of them in respect of the year on the basis of an audit of director's actual attendance at Board and Committee meetings. Where applicable, the remainder of the global amount fixed by the Annual General Meeting is allocated in proportion to the amount paid to each director. In the event of an additional extraordinary meeting of the Board or Committees, the amount of the remuneration due to each director is adjusted in proportion to the amounts paid to each director.

The Board of directors then approves the individual distribution of the directors' remuneration in respect of the year and its payment to the directors (subject to the provisions of article L.225-100 II of the French Commercial Code).

II. Remuneration of the Chairman of the Board of directors

The Chairman's fixed annual remuneration amounts to EUR 950,000 gross.

The Chairman does not receive any annual or multi-annual variable remuneration. The absence of variable remuneration reflects the independence of the Chairman with respect to the Executive Management.

Should a new Chairman be appointed, on the proposal of the Remuneration Committee and under this remuneration policy, the Board of directors will set the amount of their fixed remuneration in line with the new Chairman's profile and experience.

III. Remuneration of Executive Management

Remuneration includes:

- a fixed component;
- an annual variable component;
- a conditional long-term incentive plan (LTIP), which forms the multi-annual variable component.

The levels of these different components are determined using established market benchmarks.

Remuneration takes into account the cap on total variable remuneration in relation to fixed remuneration (including awards under long-term incentive plans) in accordance with article L.511-78 of the French Monetary and Financial Code, applicable specifically to credit institutions.

In accordance with paragraph 2 of said article, the Shareholders' Annual General Meeting of BNP Paribas of 24 May 2018 decided to reset this cap at twice the amount of fixed remuneration.

For the purposes of calculating the aforementioned ratio, a discount rate may in addition be applied to no more than 25% of the total variable remuneration inasmuch as the payment is made in the form of instruments deferred for at least 5 years, in accordance with article L.511-79 of the French Monetary and Financial Code.

1. Fixed remuneration

The Chief Executive Officer's annual fixed remuneration amounts to EUR 1,562,000 gross.

The Chief Operating Officer's annual fixed remuneration amounts to EUR 1,000,000 gross.

Should a new Chief Executive Officer or a new Chief Operating Officer be appointed, on the proposal of the Remuneration Committee and under this remuneration policy, the Board of directors will set their fixed remuneration in line with their profile and experience. Annual and multi-annual variable remuneration components will be set in line with the principles appearing in this remuneration policy.

2. Annual variable remuneration

The variable component is intended to reflect the effective contribution of executive corporate officers to the success of BNP Paribas in respect of their functions as executive managers of an international financial services Group.

General principles

The variable remuneration of members of the Executive Management is determined from a target remuneration equal to 100% of their annual fixed remuneration for the Chief Executive Officer and the Chief Operating Officer.

It varies in accordance with criteria representative of the Group's results, CSR-linked criteria and the qualitative assessment by the Board of directors.

In addition, the payment of the annual variable remuneration includes a "*malus*" and "claw-back" arrangement, as well as a cancellation clause in the event of a bank resolution measure, in accordance with same terms and conditions as those described below for the LTIP (see 3 below).

Criteria linked to the Group's financial performance

Criteria linked to the Group's financial performance accounts for 75% of the target variable remuneration and enables the corresponding portion of the remuneration to be calculated in proportion to the change in numerical indicators.

If objectives based on quantitative criteria are exceeded (or not achieved), the fraction of the target remuneration in question changes proportionally within the limits of the cap mentioned below.

The quantitative criteria apply to the Group's overall performance, based on two criteria that are given equal weighting:

- ratio of net earnings per share for the year to net earnings per share for the previous year (37.5% of target variable remuneration);
- percentage achievement of the Group's budgeted gross operating income (37.5% of the target variable remuneration).

Criteria linked to the Group's CSR performance

A portion of 10% of the target variable remuneration is linked to the Group's CSR performance.

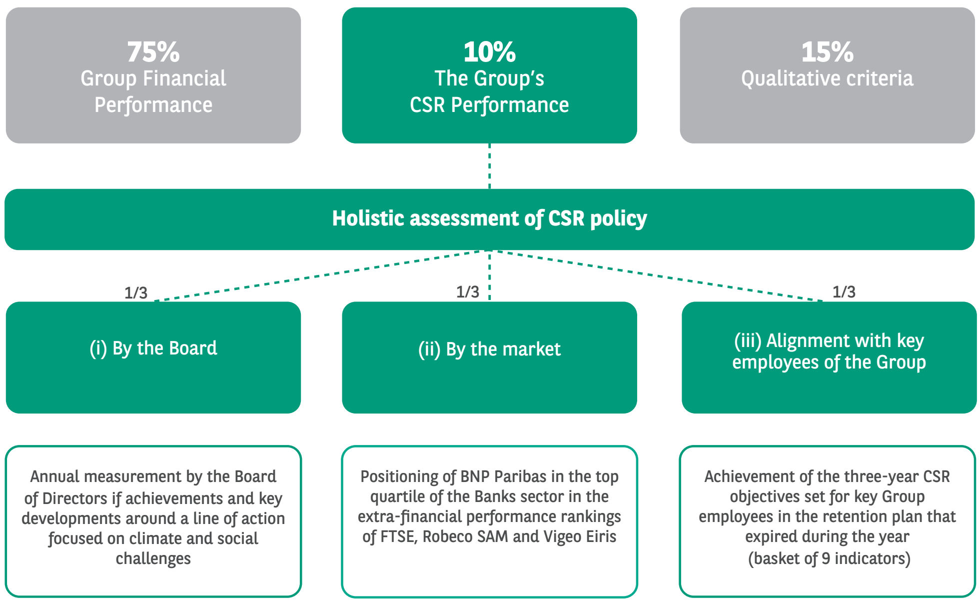
The allocation of this portion of the annual variable remuneration is based on multi-criteria measurement based on a holistic approach of actions undertaken by the BNP Paribas Group outside the Company with respect to social, societal and environmental issues.

With this in mind, this remuneration structure includes three weighted criteria, each at 3.33%:

(i) the Board of directors' assessment of the year's highlights, primarily with regard to climatic and social challenges;

(ii) publications of extra-financial rating agencies measuring the quality of the BNP Paribas' CSR positioning relative to its peers;

(iii) an alignment with the CSR objectives included in the remuneration due to retention plans granted to the Group's key employees.



Qualitative criteria

The portion of the variable remuneration linked to the Board of directors' qualitative assessment is 15% of the target variable remuneration.

The performance of this qualitative assessment by the Board of directors is considered essential, especially in view of the reinforcement of its responsibilities for monitoring and control provided by the French Monetary and Financial Code since 2014 (thereby implementing CRD 4). In addition to the Bank's strategy, which it must approve, the Board of directors must also assess the performance of Executive Management based on their capacities for anticipation, decision-making, leadership and exemplary behaviour.

To do this, the Board assesses the qualitative aspect of annual variable remuneration, regarding the implementation of the Bank's strategic guidelines, in particular its transformation plan and its human, organisational, technical and CSR dimensions in the general context of the year under consideration.

SUMMARY OF CRITERIA FOR SETTING ANNUAL VARIABLE REMUNERATION

Criteria applicable	% of fixed remuneration	Type
Criteria linked to the Group's financial performance	37.50%	Change in earnings per share
	37.50%	Achievement of target gross operating income
Criteria linked to the Group's CSR performance	10.00%	Multicriteria assessment of the actions taken by BNP Paribas Group with respect to social, societal and environmental issues
Qualitative criteria	15.00%	Assessment with regard to implementation of the Bank's strategic guidelines, particularly the human, organisational and technical dimensions of its transformation plan, and taking into account the general context of the year under consideration

Ceiling

The Board of directors ensures that annual variable remuneration is in line with the Group's results.

In any case:

- each of the two criteria linked to the Group's financial performance is capped at 130% of its target weight and cannot therefore lead to the award of an annual variable remuneration greater than 48.75% of the fixed remuneration;
- the criteria linked to the Group's CSR performance and qualitative criteria are capped at 100% of their target weight and cannot therefore lead to the award of an annual variable remuneration greater than 10% and 15% respectively of the fixed remuneration.

The amount of annual variable remuneration awarded for each of the executive corporate officers is capped at 120% of their fixed remuneration.

Terms and conditions of payment

The payment terms for variable remuneration of BNP Paribas Group's executive corporate officers, in accordance with the provisions of the French Monetary and Financial Code and the European Banking Authority's Guidelines on remuneration policy, are:

- 60% of annual variable remuneration is deferred over five years, at the rate of one-fifth per year;
- regarding the non-deferred portion of the variable remuneration:
  - half will be paid in cash in May of the year of the award, subject to the approval of the Shareholders' Annual General Meeting under the terms provided for by article L.225-100 III of the French Commercial Code; and less payments received for directorships, where applicable, within the Group for entities other than BNP Paribas (SA);
  - and half will be paid in cash, indexed to BNP Paribas share performance, at the end of a one-year holding period starting on the award date (award date is the date of the Board of directors' decision), *i.e.* in practice, in March of the year following the year in which the remuneration is awarded;
- the deferred portion of the variable remuneration will be paid on an annual basis in five instalments over five years, the first instalment only being paid at the end of a deferred period of one year from the award date of the variable remuneration, provided that the Group's ROE before tax for the year preceding the payment is greater than 5%. Each instalment will be paid:
  - half in cash in March every year,
  - and half in cash, indexed to BNP Paribas share performance, in March of the following year, at the end of a one-year holding period.

3. Conditional Long-Term Incentive Plan (LTIP) covering a five-year period

To align the interests of executive corporate officers with the medium to long-term performance of the BNP Paribas Group without compromising risk management, in 2011, the Board introduced a conditional LTIP.

The LTIP, which amounts to the target annual variable remuneration awarded in respect of the previous year, is split into two equal parts: one to reward an increase in the intrinsic value of the share, and the other potential outperformance relative to peers.

First half of the award amount: intrinsic share performance

The first half of the award amount is dependent on the change in share[(1)] price given that no payment will be made for 50% of the award amount if the BNP Paribas share price does not increase by at least 5% from the date of the award by the Board of directors to the end of a five-year period from the award date.

(1) The initial and final amounts used to measure the performance of the share price over five years are as follows:

- *the initial value is the average of the opening price of the BNP Paribas share for the rolling 12-month period preceding the date of grant;*
- *the final amount is the average of the opening price of the BNP Paribas share in the rolling 12-month period preceding the payment date.*

If the share price increases by at least 5% during this period, a factor is applied to the initial amount, resulting in the amount being increased or reduced, in line with the table below:

Change in the BNP Paribas share price over 5 years	Factor applied to the first half of the award
Strictly under 5%	0 (No payment)
Equal to or higher than 5% and under 10%	40%
Equal to or higher than 10% and under 20%	80%
Equal to or higher than 20% and under 33%	120%
Equal to or higher than 33% and under 50%	130%
Equal to or higher than 50% and under 75%	150%
Equal or higher than 75%	175%

Thus, the first half of the award amount will only be paid in full at the end of the five-year period if the share price increases by more than 20% in the five years. The first half of the award will, in any event, always be less than or equal to the change in the share price and cannot, under any circumstances, exceed 175% of the award amount, assuming that the share price has increased by more than 75% at the end of the five-year period.

Second half of the award: outperformance of the BNP Paribas share relative to peers

Fulfilment of this condition is assessed by measuring the performance of the BNP Paribas share price relative to the "EURO STOXX Banks" index of main euro zone banks.

It only takes into account outperformance of the BNP Paribas share relative to the average index measured over the 12 months prior to the award date, compared with the average for this same index for a period of 12 months prior to payment. The second half of the target amount under the LTIP will only be paid in full if the share price outperforms the index by at least 10%.

Relative performance of the BNP Paribas share in relation to the performance of the EURO STOXX Banks index	Factor applied to the second half of the award
Lower or equal to 0 points	0%
0 to 5 points included	50%
5 to 10 points included	80%
10 points higher	100%

The amount determined by applying each of the conditions over the plan's five-year period is the remuneration paid under the LTIP.

Ceiling

According to the provisions of article L.511-78 of the French Monetary and Financial Code relating to the cap on the variable component as a percentage of the fixed component, total variable remuneration awarded, including amounts awarded under the LTIP, may not be more than twice the fixed remuneration, in accordance with the decision of the Shareholders' Annual General Meeting on 24 May 2018. To calculate the ratio, a discount rate may in addition be applied to no more than 25% of the total variable remuneration inasmuch as the payment is made in the form of instruments deferred for at least five years.

Payment of LTIP

In application of the factor mentioned above, and in line with the change in the BNP Paribas share price, the first half of the LTIP award may not exceed 175% of the initial award amount. Payment of the second half of the award may not, under any circumstances, exceed the total award amount.

Thus, under no circumstances can payments under the LTIP exceed 137.5% of their award value.

Continued employment requirement

LTIP rules require continued employment throughout the entire duration of the plan. Departure from the Group would result in the LTIP not being paid. Nonetheless, in the event of retirement or death after the end of the first year of the plan, payments would be made provided that performance conditions are met and subject to assessment by the Board of directors.

Malus and Claw-back clauses

The LTIP provides for "malus" and "claw-back" arrangements. Accordingly, should the beneficiary adopt a behaviour or perform acts which do not comply with BNP Paribas' requirements as defined, in particular, as regard compliance with the code of conduct, applicable Internal rules and regulations, assessment and management of risks applicable to Group employees, the Board of directors may decide not only not to proceed with the payment of the set amount whether the employee still works for the Company or not, but may also request reimbursement for all or part of the sums paid under previous plans over the past five years.

Moreover, this rule provides that in the event of the implementation of a bank resolution measure under the French Monetary and Financial Code, the LTIP rights shall be definitively cancelled.

The Board of directors reserves the right to reduce awards under the LTIP.

IV. Extraordinary remuneration

No extraordinary remuneration may be paid to the directors, the Chairman of the Board of directors, the Chief Executive Officer or the Chief Operating Officer.

V. Benefits in kind

The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer have a company car and a mobile phone.

VI. Stock option or share purchase subscription plans

The corporate officers do not benefit from any stock option or share purchase subscription plans.

VII. Performance shares

The corporate officers do not receive any performance or free shares.

VIII. Post-employment benefits

1. Payments or benefits due or likely to become due upon termination or change in functions

Corporate officers do not receive any contractual remuneration for termination of their term of directorship.

2. Post employment benefits

Corporate officers, with the exception of the Chief Operating Officer, do not receive post-employment benefits when they leave the Company or when they retire.

The Chief Operating Officer is entitled to the standard retirement benefits awarded to all BNP Paribas SA employees pursuant to his initial employment contract.

3. Top-up pension plan

The executive corporate officers benefit solely from the defined-contribution top-up pension plan set up for all BNP Paribas (SA) employees, in accordance with article 83 of the French General Tax Code.

4. Welfare benefit plans

The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer are entitled to the same flexible welfare benefits (death and disability insurance, as well as the common healthcare benefit scheme) as all BNP Paribas (SA) employees.

They also benefit from the *Garantie Vie Professionnelle Accidents* system (death and disability insurance), which covers all employees of BNP Paribas (SA).

The Chief Executive Officer and the Chief Operating Officer are also entitled to the supplementary plan set up for members of the Group's Executive Committee, which pays out additional capital of EUR 1.10 million in the event of work-related death or total and permanent disability. The employer contribution under this scheme is recognised as a benefit in kind.

5. Non-compete agreement

Please note that the Chief Executive Officer signed a non-compete agreement with BNP Paribas (SA) on 25 February 2016. This agreement was approved by the Annual General Meeting of 26 May 2016 pursuant to the provisions of article L.225-38 of the French Commercial Code.

Under this agreement, if he ceases to hold any role or position in BNP Paribas, Mr. Jean-Laurent Bonnafé undertakes, for a period of 12 months, not to take any role whatsoever, either directly or indirectly, for a credit institution, investment or insurance firm whose securities are traded on a regulated market in France or abroad, or in France for a credit institution, investment or insurance firm whose securities are not traded on a regulated market.

Under this agreement, the Chief Executive Officer will receive a payment equal to 1.2 times the total of his fixed and variable remuneration (excluding multi-annual variable remuneration) received during the year prior to his departure. One-twelfth of the indemnity would be paid each month.

In accordance with the Afep-Medef Code and article R.225-29-1 of the French Commercial Code which stipulate that the payment of a non-compete indemnity must be excluded if the person concerned claimed his pension rights or has exceeded the age of 65 and in line with the stipulations of said non-compete agreement, the Board of directors and the Chief Executive Officer have confirmed that they comply with this provision.

IX. Loans, advances and guarantees granted to the Group's corporate officers

BNP Paribas corporate officers and their spouses may be granted loans.

These loans, representing normal transactions, are granted on an arm's length basis.

COMPONENTS OF REMUNERATION PAID IN 2019 OR ALLOCATED IN RESPECT OF THE SAME YEAR SUBMITTED TO THE *EX POST* VOTE OF THE SHAREHOLDERS DURING THE ANNUAL GENERAL MEETING OF 19 MAY 2020 IN ACCORDANCE WITH ARTICLE L.225-100 OF THE FRENCH COMMERCIAL CODE

The total remuneration of corporate officers, as described below, complies with the remuneration policy adopted during the Annual General Meeting of 23 May 2019.

Directors' remuneration *(AMOUNTS IN EUROS)*

Directors	Amounts paid in 2018 in respect of the year (for reference)	Amounts paid in 2019 in respect of the year
ASCHENBROICH Jacques	77,772	79,255
BONNAFÉ Jean-Laurent	59,924	60,222
de CHALENDAR Pierre André	111,195	93,756
COHEN Monique	128,718	124,270
DE PLOEY Wouter	97,891	87,110
EPAILLARD Hugues(1)	63,548	103,726
GIBSON-BRANDON Rajna(2)	1,893	96,777
GUILLOU Marion	103,732	102,014
KESSLER Denis	100,162	100,403
LEMIERRE Jean	63,169	60,222
MISSON Nicole(3)	17,144	None
PARISOT Laurence(4)	73,878	None
SCHWARZER Daniela	100,811	85,901
TILMANT Michel	121,904	133,635
VERRIER Sandrine	71,606	70,493
WICKER-MIURIN Fields	106,652	102,216
TOTAL	**1,300,000**	**1,300,000**

(1) Term of directorship began on 16 February 2018.
(2) Term of directorship began on 28 November 2018.
(3) Term of directorship ended on 15 February 2018.
(4) Term of directorship ended on 25 September 2018.

For information, the rules for allocating directors' remuneration are as follows:

		Variable portion	
	Fixed portion(1)	Scheduled meeting	Extraordinary meeting
Directors resident in France	EUR 21,000	EUR 3,000/meeting	EUR 4,400/meeting
Directors resident outside of France	EUR 21,000	EUR 4,200/meeting	EUR 4,600/meeting(2)
Chairman of a specialised committee		EUR 5,700/meeting	EUR 5,700/meeting
Member of a specialised committee		EUR 2,700/meeting	EUR 2,700/meeting

(1) The fixed part is calculated prorata temporis of the term of directorship during the year in question.
(2) Or EUR 4,400 per session if participation is via videoconference or telecommunication means.

Directors representing employees receive remuneration in respect of their employment contract as described in the section "Remuneration and benefits of the directors representing employees" of this document.

Remuneration and benefits for the executive corporate officers

TABLE NO. 1 COMPONENTS OF REMUNERATION PAID DURING THE 2019 FINANCIAL YEAR OR AWARDED IN RESPECT OF THIS SAME FINANCIAL YEAR TO MR JEAN LEMIERRE, CHAIRMAN OF THE BOARD OF DIRECTORS, SUBMITTED TO THE SHAREHOLDERS' VOTE *(AMOUNTS IN EUROS)*

a. Components of remuneration awarded in respect of the 2019 financial year to Mr Jean Lemierre, Chairman of the Board of directors

	Amounts	Comments
Fixed remuneration	950,000 *(paid)*	The remuneration paid to Jean Lemierre is determined by the method recommended by the Remuneration Committee and approved by the Board of directors. His fixed remuneration has not changed since December 2014.
Annual variable remuneration	None	Mr Jean Lemierre is not entitled to multi-annual variable remuneration. The absence of variable remuneration reflects the independence of the Chairman with respect to the Executive Management.
Multi-annual variable remuneration	None	Mr Jean Lemierre is not entitled to multi-annual variable remuneration. The absence of variable remuneration reflects the independence of the Chairman with respect to the Executive Management.
Remuneration linked to the term of directorship	60,222 *(paid)*	Mr Jean Lemierre does not receive any remuneration in respect of directorships that he holds in the Group's companies other than BNP Paribas (SA).
Extraordinary remuneration	None	
Stock options awarded during the period	None	
Performance shares awarded during the year	None	
Benefits in kind	3,632	Mr Jean Lemierre has a company car and a mobile phone.
TOTAL	**1,013,854**	

b. The components of remuneration paid to Mr Jean Lemierre, Chairman of the Board of directors during financial year 2019 in respect of previous financial years (having been subject to a shareholders' vote at the time of their allocation)

	Amounts	Comments
None		

c. All types of commitments undertaken corresponding to remuneration components, compensation or benefits in kind due or likely to be due as a result of the assumption, termination or change in functions or after performing these to the benefit of Mr Jean Lemierre, Chairman of the Board of directors

	Amounts	Comments
Sign-on bonuses and severance payments	None	Mr Jean Lemierre receives no sign-on bonuses or severance payments.
Top-up pension plan with defined benefits	None	Mr Jean Lemierre does not benefit from any supplemental defined-benefit pension plans.
Top-up pension plan defined-contribution	1,743	Mr Jean Lemierre benefits from the defined-contribution plan set up for all BNP Paribas (SA) employees, in accordance with pension plans (article 83 of the French General Tax Code). The amount of contributions paid by the Company under the plan to Mr Jean Lemierre in 2019 was EUR 1,743.
Welfare benefit and healthcare plans	3,274	Mr Jean Lemierre benefits from the disability, invalidity and death, and healthcare insurance plans offered to employees of BNP Paribas (SA). He also benefits from death and disability insurance covering all employees of BNP Paribas (SA). This amount is the total received.

TABLE NO. 2 COMPONENTS OF REMUNERATION PAID DURING THE 2019 FINANCIAL YEAR OR AWARDED IN RESPECT OF THIS SAME FINANCIAL YEAR TO MR JEAN-LAURENT BONNAFÉ, CHIEF EXECUTIVE OFFICER, SUBMITTED TO THE SHAREHOLDERS' VOTE *(AMOUNTS IN EUROS)*

a. Components of remuneration paid in respect of financial year 2019 to Mr Jean-Laurent Bonnafé, Chief Executive Officer

	Amounts	Comments
Fixed remuneration	1,562,000 *(paid)*	The remuneration paid to Jean-Laurent Bonnafé is determined by the method recommended by the Remuneration Committee and approved by the Board of directors. The most recent increase in fixed remuneration is dated 25 February 2016 effective as of January 2016.
Annual variable remuneration[1]	1,611,515	The variable remuneration of Mr Jean-Laurent Bonnafé changes on the basis of criteria representative of Group results and his managerial performance. It is expressed as a percentage of a target variable remuneration corresponding to 100% of fixed remuneration for the year. The quantitative criteria apply to the Group's overall performance and are as follows: ■ ratio of net earnings per share for the year to net earnings per share for the previous year (37.5% of target variable remuneration); ■ percentage achievement of the Group's budgeted gross operating income (37.5% of the target variable remuneration); ■ multi-criteria assessment of the actions taken by the Group with respect to social, societal and environmental issues (10% of target variable remuneration). After taking into account both quantitative, CSR and qualitative criteria, and the evolution of the Group's results, the Board of directors set the annual variable remuneration of Jean-Laurent Bonnafé for 2019 at EUR 1,611,515 *i.e.* 103% of the target; ■ half of the undeferred portion of the variable remuneration will be paid in May 2020, and half in March 2021, indexed to the performance of the BNP Paribas share; ■ the deferred portion of the variable remuneration will be paid in fifths as of 2021. Each payment will be made half in March every year, and half in March of the following year, indexed to the performance of the BNP Paribas share. The annual payment of the deferred variable remuneration is subject to the condition that the ROE before tax of the Group for the year preceding the payment is greater than 5%. The ratio between the annual fixed remuneration and variable remuneration, as required under the French Commercial Code, was 103%.
Conditional long-term remuneration programme (fully deferred for a period of five years)	617,927	The fair value of the LTIP awarded to Mr Jean-Laurent Bonnafé on 4 February 2020 with respect to 2019 amounted to EUR 617,927. The term of the LTIP is five years. The two conditions of the LTIP, one recognising an increase in the intrinsic value of the BNP Paribas share and the other recognising the potential outperformance of its peers, are assigned equal weighting in order to measure their effects separately. Thus, payments under the LTIP may not exceed 137.5% of their award value.
Remuneration linked to the term of directorship	60,222	Mr Jean-Laurent Bonnafé receives remuneration for his term of directorship at BNP Paribas (SA).
Extraordinary remuneration	None	
Stock options awarded during the period	None	
Performance shares awarded during the year	None	
Benefits in kind	6,507	Mr Jean-Laurent Bonnafé has a company car and a mobile phone. This amount also includes the employer contribution under the Executive Committee professional life insurance policy, offering an additional EUR 1.10 million in the event of death or total permanent disability linked to the employment activity. BNP Paribas (SA)'s annual employer contribution was EUR 1,460 per beneficiary for 2019.
TOTAL	**3,858,171**	

(1) Payment subject to the approval of the Annual General Meeting of 19 May 2020 pursuant to article L.225-100 III of the French Commercial Code.

b. Components of remuneration paid to Mr Jean-Laurent Bonnafé, Chief Executive Officer, during financial year 2019 in respect of previous years (having been subject to the shareholders' vote at the time of their allocation)

In euros	Date submitted to the AGM and resolution number	Amount paid in 2019
Annual variable remuneration		1,184,433
Including partial payment of the annual variable remuneration in respect of 2018	*23 May 2019 14th resolution*	*294,049*
Including partial payment of the annual variable remuneration in respect of 2017	*24 May 2018 15th resolution*	*314,087*
Including partial payment of the annual variable remuneration in respect of 2016	*23 May 2017 14th resolution*	*175,568*
Including partial payment of the annual variable remuneration in respect of 2015	*26 May 2016 11th resolution*	*400,729*
Multi-annual variable remuneration	*14 May 2014 12th resolution*	0

c. All types of commitments corresponding to types of commitments undertaken corresponding to remuneration components, compensation or benefits in kind due or likely to be due as a result of the assumption, termination or change in functions or after performing these to the benefit of Mr Jean-Laurent Bonnafé, Chief Executive Officer

	Amounts	Comments
Sign-on bonuses and severance payments	None	
Non-compete indemnity	None	Under the non-compete clause signed on 25 February 2016, and subject to the conditions detailed below, Jean-Laurent Bonnafé would receive remuneration equal to 1.2 times the sum of his fixed and variable remuneration (excluding multi-annual variable remuneration) received during the year prior to his leaving the Group. One-twelfth of the indemnity would be paid each month. Under this agreement, if he ceases to hold any role or position in BNP Paribas, Jean-Laurent Bonnafé undertakes, for a period of 12 months, not to take any role whatsoever, either directly or indirectly, for a credit institution, investment or insurance firm whose securities are traded on a regulated market in France or abroad, or in France for a credit institution, investment or insurance firm whose securities are not traded on a regulated market. In accordance with the Afep-Medef Code and article R.225-29-1 of the French Commercial Code, which stipulate that the payment of a non-compete payment must be excluded if the person concerned claimed his pension rights or has exceeded the age of 65 and in line with the stipulations of said non-compete agreement, the Board of directors and the Chief Executive Officer have confirmed that they comply with this provision.
Top-up pension plan with defined benefits	None	Mr Jean-Laurent Bonnafé does not benefit from any supplemental defined-benefit pension plans.
Top-up pension plan defined-contribution	1,743	Mr Jean-Laurent Bonnafé benefits from the defined-contribution plan set up for all BNP Paribas (SA) employees, in accordance with article 83 of the French General Tax Code. The amount of contributions paid by the Company under the plan to Mr Jean-Laurent BONNAFÉ in 2019 was EUR 1,743.
Welfare benefit and healthcare plans	3,274	Mr Jean-Laurent Bonnafé benefits from the disability, invalidity and death and healthcare insurance plans offered to employees of BNP Paribas (SA). He also benefits from death and disability insurance covering all employees of BNP Paribas (SA).

TABLE NO. 3 COMPONENTS OF REMUNERATION PAID DURING THE 2019 FINANCIAL YEAR OR AWARDED IN RESPECT OF THIS SAME FINANCIAL YEAR TO MR PHILIPPE BORDENAVE, CHIEF OPERATING OFFICER, SUBJECT TO THE SHAREHOLDERS' VOTE *(AMOUNTS IN EUROS)*

a. Components of remuneration paid in respect of financial year 2019 to Mr Philippe Bordenave, Chief Operating Officer

	Amounts	Comments
Fixed remuneration due with respect to the year	1,000,000 *(paid)*	The remuneration paid to Mr Philippe Bordenave is determined by the method recommended by the Remuneration Committee and approved by the Board of directors. The most recent increase in fixed remuneration is dated 25 February 2016 effective as of 1 January 2016.
Annual variable remuneration awarded in respect of the year(1)	1,031,700	The variable remuneration of Philippe Bordenave changes on the basis of criteria representative of Group results and his managerial performance. It is expressed as a percentage of a target variable remuneration corresponding to 100% of fixed remuneration for the year. The quantitative criteria apply to the Group's overall performance and are as follows: ■ ratio of net earnings per share for the year to net earnings per share for the previous year (37.5% of target variable remuneration); ■ percentage achievement of the Group's budgeted gross operating income (37.5% of the target variable remuneration); ■ multi-criteria assessment of the actions taken by the Group with respect to social, societal and environmental issues (10% of target variable remuneration). After taking into account the quantitative and qualitative criteria, and the evolution of the Group's results, the Board of directors set the annual variable remuneration of Philippe Bordenave for 2019 at EUR 1,031,700, or 103% of the annual variable remuneration target; ■ half of the undeferred portion of the variable remuneration will be paid in May 2020, and half in March 2021, indexed to the performance of the BNP Paribas share; ■ the deferred portion of the variable remuneration will be paid in fifths as of 2021. Each payment will be made half in March every year, and half in March of the following year, indexed to the performance of the BNP Paribas share. The annual payment of the deferred variable remuneration is subject to the condition that the ROE before tax of the Group for the year preceding the payment is greater than 5%. The ratio between the annual fixed remuneration and variable remuneration, as required under the French Commercial Code, was 103%.
Conditional long-term remuneration programme (fully deferred for a period of five years)	395,600	The fair value of the LTIP awarded to Mr Philippe Bordenave on 4 February 2020 with respect to 2019 amounts to EUR 395,600. The term of the LTIP is five years. The two conditions of the LTIP, one recognising an increase in the intrinsic value of the BNP Paribas share and the other recognising the potential outperformance of its peers, are assigned equal weighting in order to measure their effects separately. Thus, payments under the LTIP may not exceed 137.5% of their award value.
Remuneration linked to the term of directorship	None	Mr Philippe Bordenave does not receive remuneration in respect of the directorships that he holds in the Group's companies.
Extraordinary remuneration	None	
Stock options awarded during the period	None	
Performance shares awarded during the year	None	
Benefits in kind	3,953	Mr Philippe Bordenave has a company car and a mobile phone. This amount also includes the employer contribution under the Executive Committee professional life insurance policy, offering an additional EUR 1.10 million in the event of death or total permanent disability linked to the employment activity. BNP Paribas (SA)'s annual employer contribution was EUR 1,460 per beneficiary for 2019.
TOTAL	**2,431,253**	

(1) Payment subject to the approval of the Annual General Meeting of 19 May 2020 pursuant to article L.225-100 III of the French Commercial Code.

b. The components of remuneration paid to Mr Philippe Bordenave, Chief Operating Officer, during financial year 2019 in respect of previous financial years (having been subject to a shareholders' vote at the time of their allocation)

In euros	Date submitted to the AGM and resolution number	Amounts paid in 2019
Annual variable remuneration		758,670
Including partial payment of the annual variable remuneration in respect of 2018	*23 May 2019 15th resolution*	*188,252*
Including partial payment of the annual variable remuneration in respect of 2017	*24 May 2018 16th resolution*	*201,096*
Including partial payment of the annual variable remuneration in respect of 2016	*23 May 2017 15th resolution*	*112,384*
Including partial payment of the annual variable remuneration in respect of 2015	*26 May 2016 12th resolution*	*256,938*
Multi-annual variable remuneration	*14 May 2014 13th resolution*	0

c. All types of commitments undertaken corresponding to remuneration components, compensation or benefits in kind due or likely to be due as a result of the assumption, termination or change in functions or after performing these to the benefit of Mr Philippe Bordenave, Chief Operating Officer

	Amounts	Comments
Sign-on bonuses and severance payments	None	Mr Philippe Bordenave receives no sign-on bonuses or severance payments.
Top-up pension plan with defined benefits	None	Mr Philippe Bordenave benefits from no supplemental defined-benefit pension plans.
Top-up pension plan defined-contribution	1,743	The corporate officers benefit from the defined-contribution plan (article 83 of the French General Tax Code) set up for all employees of BNP Paribas (SA). The amount of contributions paid by the Company under the plan in 2019 to Mr Philippe Bordenave was EUR 1,743.
Welfare benefit and healthcare plans	3,274	Mr Philippe Bordenave benefits from the disability, invalidity and death and healthcare insurance offered to employees of BNP Paribas (SA). He also benefits from death and disability insurance covering all employees of BNP Paribas (SA).

Details relating to the annual variable remuneration of executive corporate officers

Assessment of the achievement of the targets set for 2019

At its meeting of 4 February 2020, the Board of directors assessed the achievement of the objectives set in accordance with the remuneration policy.

Group performance criteria

The Board of directors reviewed the achievement of the quantitative portion of the annual variable remuneration in terms of the criteria linked to the Group's performance provided for in the remuneration policy.

As regards the criterion of ratio of net earnings per share to net earnings per share for the previous year, its measure was equal to 40.64% of the target variable remuneration for 2019.

As regards the criterion of achievement of the budgeted gross operating income, its measure was equal to 37.53% of the target variable remuneration for 2019.

Criteria linked to the Group's CSR performance

The Board of directors reviewed the achievement of the multi-criteria measurement with regard to the three criteria linked to the Group's CSR performance provided for in the remuneration policy, each of which has a 3.33% weighting.

(i) Board's assessment of the CSR policy

With respect to the qualitative assessment, the Board of directors considered that this criteria had been achieved taking into account the 2019 highlights in terms of climate and social issues:

BNP Paribas has an ambitious policy of societal engagement, with initiatives to promote ethical responsibility and consideration of social and environmental issues with a clear energy strategy. The Bank's aim is to be a leader in sustainable finance.

a) In terms of social issues, it promotes a more inclusive society:

- The Bank is a founding partner of *L'Ascenseur*, a unique space dedicated to equal opportunities, which was launched in Paris where 20 associations came together to support young people with a view to improving social inclusion;
- BNP Paribas was the first CAC 40 company to sign the *#JamaisSansElles* charter, committing the Executive Committee to stop taking part in events with more than three speakers where none of them are women;
- BNP Paribas is ranked in the Top 100 worldwide for gender equality, according to the NGO, Equileap;

- The Bank signed a global partnership with the Nobel prizewinner, Professor Yunus (Grameen Creative Lab) to promote the creation of "social business" and products with a positive impact;
- The introduction, in 2019, of a cap on fees for payment irregularities affecting the bank accounts of customers considered to be financially vulnerable.

b) In terms of energy and ecological transition:

- BNP Paribas is ranked as the top European bank in terms of sustainable development in the Global 100 "Most Sustainable Corporations";
- The Bank announced that it would stop financing operators whose main business was related to the unconventional hydrocarbons sector and would stop all finance for coal industry projects by 2030 in the European Union and by 2040 in the rest of the world;
- It revised its renewable energy funding target upwards.

(ii) Market assessment of the CSR policy

The CSR criterion linked to the Group's position, in relation to its peers, in the extra-financial performance rankings of FTSE, Robeco SAM and Vigeo-Eiris, was met as BNP Paribas was in the top quartile of their Banking sector ratings.

(iii) Assessment of the CSR policy by alignment with employees

Regarding the criterion of alignment with the Group's key employees, the three-year CSR targets set in the retention plan for the Group's key employees were also met.

Thus, the multi-criteria measurement, as a percentage of the target variable remuneration, amounts to 10.00% for 2019.

	CSR - Assessment of the CSR policy			
	(i) By the Board	(ii) By the market	(iii) Alignment with employees	Multi-criteria measurement
Weighting	3.33%	3.33%	3.33%	
Measurement	3.33%	3.33%	3.33%	**10.00%**

Qualitative criteria

The Board of directors assessed the quantitative portion of the annual variable remuneration in terms of the application of the criteria provided for in the remuneration policy.

For 2019, the Board determined that Mr Jean-Laurent Bonnafé had principally achieved the following:

- his decisive role in the Bank's management within the context of the 2017-2020 strategic plan, (solid operating results, additional cost reduction measures in order to withstand an environment of persistently low interest rates), whilst still ensuring an increase in the CET1 ratio in view of the Basel III revision;
- his key role in relation to major clients;
- ongoing process automation and the digitisation of "customer journeys";
- his personal commitment to issues relating to transforming the Bank's information systems and his involvement in resolving IT incidents;
- his role in the transfer of Deutsche Bank's prime brokerage business;
- his commitment to make the bank a recognised leader in terms of its CSR strategy (the bank was named the "world's best bank for corporate responsibility 2019" as a result of its sustainable finance initiatives (Euromoney awards for excellence));

and for Philippe Bordenave, in line with the outcomes assessed for Jean-Laurent Bonnafé:

- solid operational results and robust asset and liability management as part of the 2017-2020 Development and Transformation Plan and support for the plan especially the financial, cost control and technological innovation aspects;
- his involvement in the resolution of IT incidents and in the improvement and transformation of the Bank's information systems;
- his role in brokering the agreement for the transfer of Deutsche Bank's prime brokerage business and in completing this transfer;
- fulfilment of the commitments of Group CSR Policy;
- his involvement in the reviews performed by the SSM.

Summary

After taking into account all the criteria used to set annual variable remuneration, and the evolution of the Group's operating results, the Board of directors, on the proposal of the Remuneration Committee, set the variable remuneration awarded in respect of 2019 at:

- EUR 1,611,515 for Jean-Laurent Bonnafé (representing 103% of his target variable remuneration);
- EUR 1,031,700 for Philippe Bordenave (representing 103% of his target variable remuneration).

The result in respect of each criterion is set out in the following table:

In euros		Financial performance criteria: BNPA[(2)] Group	Financial performance criteria: Gross Operating Income[(3)] Group	CSR performance criteria	Qualitative criteria	Variable with respect to 2019	Reminder of target variable remuneration
Jean-Laurent Bonnafé	Weighting[(1)]	37.50%	37.50%	10.00%	15.00%		
	Measurement[(1)]	40.64%	37.53%	10.00%	15.00%	**1,611,515**	*1,562,000*
Philippe Bordenave	Weighting[(1)]	37.50%	37.50%	10.00%	15.00%		
	Measurement[(1)]	40.64%	37.53%	10.00%	15.00%	**1,031,700**	*1,000,000*

(1) As a percentage of target variable remuneration.
(2) Ratio of earnings per share (EPS) for the year to earnings per share for the previous year.
(3) Percentage achievement of target gross operating income (GOI).

Terms and conditions of payment

a) The payment terms for variable remuneration of BNP Paribas Group executive corporate officers in respect of 2019, in accordance with the provisions of the French Monetary and Financial Code and the EBA's 21 December 2015 Guidelines on remuneration policy are:

- 60% of variable remuneration is deferred over five years, at the rate of one-fifth per year;
- half of the non-deferred portion of the variable remuneration is paid in May 2020, subject to the approval of the Shareholders' Annual General Meeting under the terms provided for by article L.225-100 of the French Commercial Code; and half in March 2021, indexed to the performance of the BNP Paribas share;
- the deferred portion of the variable remuneration will be paid in fifths starting in 2021. Each payment will be made half in March every year, and half in March of the following year, indexed to the performance of the BNP Paribas share since the award. The last payment in respect of 2019 will be made in March 2026.

b) In addition, the annual payment of the deferred variable remuneration is subject to the condition that the ROE before tax of the Group for the year preceding the payment is greater than 5%.

The Board found that this performance condition was met in 2019; accordingly, deferred remuneration payable in 2020 in respect of previous plans will be paid out.

Details relating to the conditional long-term incentive plan (LTIP) covering a five-year period

LTIP amounts awarded in 2020

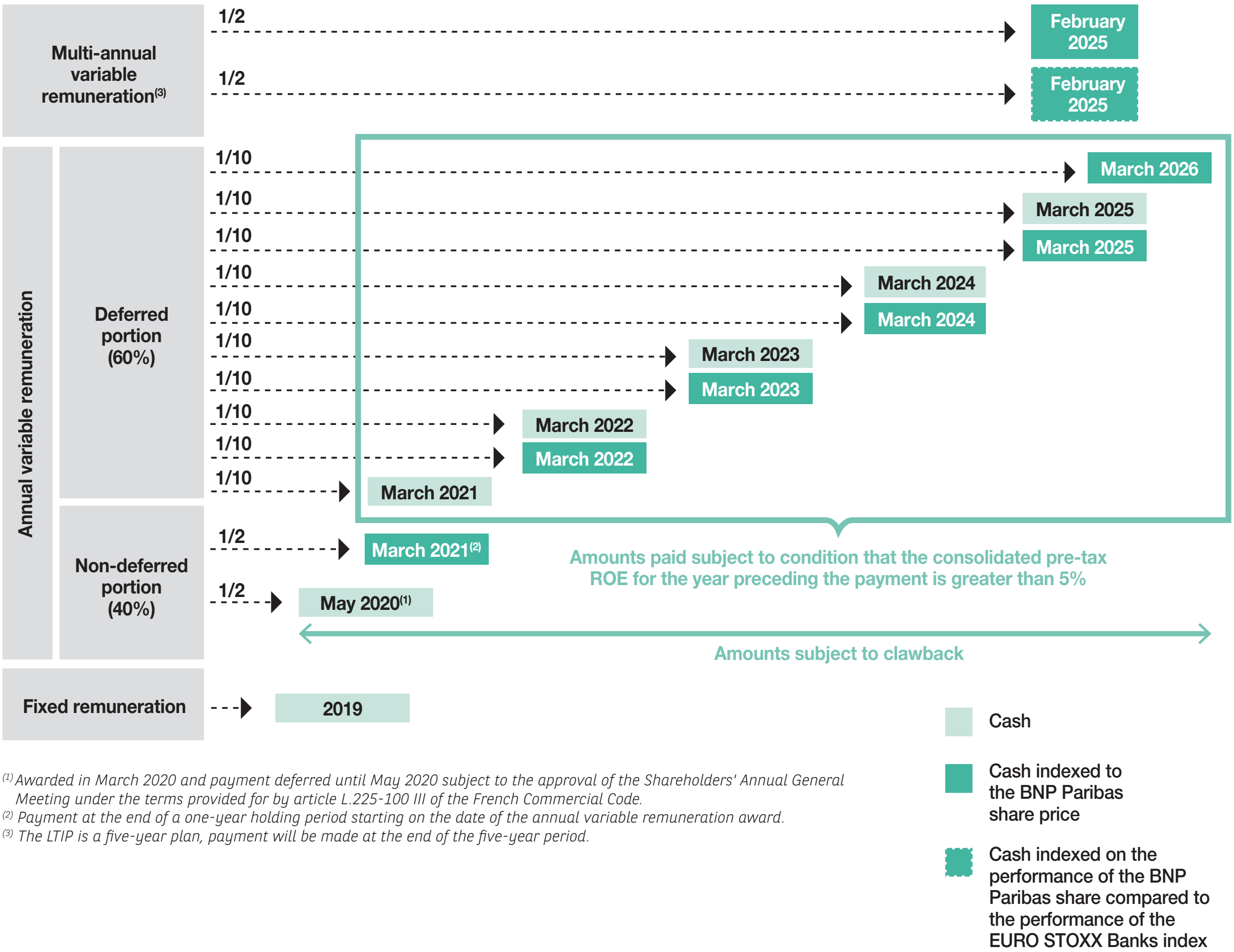
In accordance with the remuneration policy and on the proposal of the Remuneration Committee, the Board of directors set the LTIP amounts to be awarded in 2020.

The amount awarded under the LTIP is equal to the target annual variable remuneration for 2019.

LTIP awarded on 4 February 2020 *(amounts in euros)*	Total awarded[(*)]	Fair value of the amount awarded[(**)]
Jean-Laurent Bonnafé	1,562,000	617,927
Philippe Bordenave	1,000,000	395,600

(*) See explanation above.
(**) Fair value in accordance with the IFRS standards of 39.56% of the amount awarded. The calculation is carried out by an independent expert.

PAYMENT STRUCTURE OF THE REMUNERATION OF EXECUTIVE CORPORATE OFFICERS WITH RESPECT TO 2019 AFTER CONSIDERATION OF THE EBA GUIDELINES



(1) Awarded in March 2020 and payment deferred until May 2020 subject to the approval of the Shareholders' Annual General Meeting under the terms provided for by article L.225-100 III of the French Commercial Code.
(2) Payment at the end of a one-year holding period starting on the date of the annual variable remuneration award.
(3) The LTIP is a five-year plan, payment will be made at the end of the five-year period.

Relative proportion of fixed and variable remuneration of executive corporate officers

The cap on total variable remuneration provided for by article L.511-78 of the French Monetary and Financial Code was not exceeded. Pursuant to article L.511-79 of the French Monetary and Financial Code, a discount rate may in addition be applied to no more than 25% of total variable remuneration inasmuch as the payment is made in the form of instruments deferred for at least 5 years.

After applying the discount rate to the variable remuneration amounts awarded in the form of instruments deferred for five years (42.85% discount in accordance with European Banking Authority guidelines on the application of the notional discount rate for variable remuneration, published on 27 March 2014), the ratio between total variable remuneration and fixed remuneration is 1.81 for the Chief Executive Officer and the Chief Operating Officer for 2019.

Use of "malus" and "claw-back" clauses

The Board of directors has not been called upon to apply the "*malus*" and "claw-back" clauses, provided for in the remuneration policy defined above.

Remuneration paid or granted by a company included in the consolidation scope

No remuneration has been paid or granted to corporate officers by a company included in the scope of consolidation of BNP Paribas within the meaning of article L.233-16 of the French Commercial Code.

Remuneration multiples and changes

In accordance with the provisions of article L.225-37-3 of the French Commercial Code and AFEP guidelines on remuneration multiples dated 28 January 2020, the level of remuneration of the Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer, with respect to the average remuneration and the median remuneration based on full-time equivalent employees of BNP Paribas (SA), as well as changes in this remuneration, these ratios and the Company's performance criteria, are shown below.

This information is provided over a five-year period.

The employees considered are those of BNP Paribas (SA) in France and its subsidiaries, continuously present over a financial year. Remuneration of employees includes the fixed portion and the variable portion of remuneration, commercial bonuses, retention plans, profit-sharing and incentive bonuses, as well as benefits in kind.

With regards to the remuneration of executive corporate officers, this corresponds to the fixed remuneration, the variable remuneration, the long-term remuneration plan, remuneration for directorships, as well as benefits in kind. This information has already been presented in this document.

	Year				
	2015	**2016**	**2017**	**2018**	**2019**
Performance of the Company					
Net pre-tax income (in millions of euros)	*10,379*	*11,210*	*11,310*	*10,208*	11,394
Change Current yr/Prev. yr		*8%*	*1%*	*-10%*	12%
Operating income (in millions of euros)	*9,787*	*10,771*	*10,310*	*9,169*	10,057
Change Current yr/Prev. yr		*10%*	*-4%*	*-11%*	10%
Net earnings per share (in euros)	*5.14*	*6.00*	*6.05*	*5.73*	6.21
Change Current yr/Prev. yr		*17%*	*1%*	*-5%*	8%
Remuneration of employees *(in thousands of euros)*					
Average remuneration	*84*	*83*	*83*	*82*	87
Change Current yr/Prev. yr		*-1%*	*0%*	*-1%*	6%
Median remuneration	*55*	*54*	*54*	*54*	58
Change Current yr/Prev. yr		*-2%*	*0%*	*0%*	7%
Chairman of the Board of directors (BD)					
Remuneration of the Chairman of the BD (in thousands of euros)	*1,001*	*1,012*	*1,016*	*1,017*	1,014
Change Current yr/Prev. yr		*1%*	*0%*	*0%*	0%
Average remuneration of employees ratio	*12*	*12*	*12*	*12*	12
Change Current yr/Prev. yr		*0%*	*0%*	*0%*	0%
Median remuneration of employees ratio	*18*	*19*	*19*	*19*	17
Change Current yr/Prev. yr		*6%*	*0%*	*0%*	11%
Director and Chief Executive Officer (CEO)					
Remuneration of CEO (in thousands of euros)	*3,592*	*4,052*	*3,686*	*3,381*	3,858
Change Current yr/Prev. yr		*13%*	*-9%*	*-8%*	14%
Average remuneration of employees ratio	*43*	*49*	*44*	*41*	44
Change Current yr/Prev. yr		*14%*	*-10%*	*-7%*	7%
Median remuneration of employees ratio	*66*	*75*	*68*	*62*	66
Change Current yr/Prev. yr		*14%*	*-9%*	*-9%*	6%
Chief Operating Officer (COO)					
Remuneration of COO (in thousands of euros)	*2,275*	*2,559*	*2,320*	*2,126*	2,431
Change Current yr/Prev. yr		*12%*	*-9%*	*-8%*	14%
Average remuneration of employees ratio	*27*	*31*	*28*	*26*	28
Change Current yr/Prev. yr		*15%*	*-10%*	*-7%*	8%
Median remuneration of employees ratio	*42*	*48*	*43*	*39*	42
Change Current yr/Prev. yr		*14%*	*-10%*	*-9%*	8%

Application of the provisions of the second paragraph of article L.225-45 of the French Commercial Code

The provisions of the second paragraph of article L.225-45 of the French Commercial Code do not need to be applied in 2019.

OTHER INFORMATION ON THE REMUNERATION OF EXECUTIVE CORPORATE OFFICERS PAID OR GRANTED IN RESPECT OF 2019, NOT SUBMITTED TO THE SHAREHOLDERS' VOTE

The components below, relating to the remuneration of executive corporate officers, reiterate some information already presented in this chapter.

➤ TOTAL REMUNERATION AWARDED IN RESPECT OF 2019 AND COMPARISON WITH 2018

	Jean-Laurent BONNAFÉ		Philippe BORDENAVE	
In euros	2018	2019	2018	2019
Fixed remuneration amount	1,562,000	1,562,000	1,000,000	1,000,000
Annual variable remuneration awarded	1,470,245	1,611,515	941,258	1,031,700
SUB-TOTAL	**3,032,245**	**3,173,515**	**1,941,258**	**2,031,700**
LTIP amount (fair value)(*)	282,644	611,927	180,950	395,600
TOTAL	**3,314,889**	**3,791,442**	**2,122,208**	**2,427,300**

(*) This is an estimated value on the award date. The final amount will be known on the date of payment.

Holding of shares resulting from the exercise of stock options

The Board of directors has decided that the minimum number of shares that Jean Lemierre, Jean-Laurent Bonnafé and Philippe Bordenave shall be required to hold for the duration of their terms of office shall be 10,000, 80,000 and 30,000 shares, respectively. The three interested parties have complied with this obligation, through the direct ownership of shares or units in the Company Savings Plan fully invested in BNP Paribas shares.

Quantitative information on the remuneration of executive corporate officers

The table below shows the gross remuneration awarded in respect of the year, including remuneration linked to a term of directorship and benefits in kind, for each executive corporate officer.

SUMMARY TABLE OF THE REMUNERATION AWARDED TO EACH EXECUTIVE CORPORATE OFFICER

In euros		2018 Total awarded	2019 Total awarded
Jean LEMIERRE Chairman of the Board of directors	Fixed remuneration	950,000	950,000
	Annual variable remuneration	None	None
	Multi-annual variable remuneration	None	None
	None Value of stock options granted during the year	None	None
	Value of performance shares awarded during the year	None	None
	Sub-total	**950,000**	**950,000**
	Extraordinary remuneration	None	None
	Remuneration linked to the term of directorship	63,169	60,222
	Benefits in kind[(1)]	3,632	3,632
	TOTAL	**1,016,801**	**1,013,854**
Jean-Laurent BONNAFÉ Director and Chief Executive Officer	Fixed remuneration	1,562,000	1,562,000
	Annual variable remuneration	1,470,245	1,611,515
	Multi-annual variable remuneration[(2)]	282,644	617,927
	None Value of stock options granted during the year	None	None
	Value of performance shares awarded during the year	None	None
	Sub-total	**3,314,889**	**3,791,442**
	Extraordinary remuneration	None	None
	Remuneration linked to the term of directorship	59,924	60,222
	Benefits in kind[(1)]	6,507	6,507
	TOTAL	**3,381,320**	**3,858,171**
Philippe BORDENAVE Chief Operating Officer	Fixed remuneration	1,000,000	1,000,000
	Annual variable remuneration	941,258	1,031,700
	Multi-annual variable remuneration[(2)]	180,950	395,600
	None Value of stock options granted during the year	None	None
	Value of performance shares awarded during the year	None	None
	Sub-total	**2,122,208**	**2,427,300**
	Extraordinary remuneration	None	None
	Remuneration linked to the term of directorship	None	None
	Benefits in kind[(1)]	3,953	3,953
	TOTAL	**2,126,161**	**2,431,253**

(1) The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer have a company car and a mobile phone. The Chief Executive Officer and Chief Operating Officer receive Executive Committee professional life insurance, for which the Company's contribution is recognised as a benefit in kind.

(2) Value of amount awarded subject to performance conditions.

The two tables below show the gross remuneration **paid in 2019**, including remuneration linked to the term of directorship and benefits in kind, for each executive corporate officer.

➤ SUMMARY TABLE OF THE REMUNERATION PAID TO EACH EXECUTIVE CORPORATE OFFICER

In euros		2018 Total paid	2019 Total paid
Jean LEMIERRE Chairman of the Board of directors	Fixed remuneration	950,000	950,000
	Annual variable remuneration	None	None
	Multi-annual variable remuneration	None	None
	Extraordinary remuneration	None	None
	Remuneration linked to the term of directorship	63,169	60,222
	Benefits in kind[(1)]	3,632	3,632
	TOTAL	**1,016,801**	**1,013,854**
Jean-Laurent BONNAFÉ Director and Chief Executive Officer	Fixed remuneration	1,562,000	1,562,000
	Annual variable remuneration	1,511,228	1,184,433
	of which annual variable remuneration in respect of 2018	*None*	*294,049*
	of which annual variable remuneration in respect of 2017	*315,352*	*314,087*
	of which annual variable remuneration in respect of 2016	*490,177*	*175,568*
	of which annual variable remuneration in respect of 2015	*452,647*	*400,729*
	of which annual variable remuneration in respect of 2014	*253,052*	*None*
	Multi-annual variable remuneration	2,217,600	0[(2)]
	Extraordinary remuneration	None	None
	Remuneration linked to the term of directorship	59,924	60,222
	Benefits in kind[(1)]	6,507	6,507
	TOTAL	**5,357,259**	**2,813,162**
Philippe BORDENAVE Chief Operating Officer	Fixed remuneration	1,000,000	1,000,000
	Annual variable remuneration	914,819	758,670
	of which annual variable remuneration in respect of 2018	*None*	*188,252*
	of which annual variable remuneration in respect of 2017	*201,890*	*201,096*
	of which annual variable remuneration in respect of 2016	*313,813*	*112,384*
	of which annual variable remuneration in respect of 2015	*290,119*	*256,938*
	of which annual variable remuneration in respect of 2014	*108,997*	*None*
	Multi-annual variable remuneration	1,135,200	0[(2)]
	Extraordinary remuneration	None	None
	Remuneration linked to the term of directorship	None	None
	Benefits in kind[(1)]	3,953	3,953
	TOTAL	**3,053,972**	**1,762,623**

The average tax and social contribution rate on this remuneration was 38% in 2019 (39% in 2018).

(1) The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officer have a company car and a mobile phone. The Chief Executive Officer and Chief Operating Officer receive Executive Committee professional life insurance, for which the Company's contribution is recognised as a benefit in kind.

(2) The LTIP granted in 2014 did not give rise to any payment in 2019 due to the failure to achieve the performance condition linked to the change in value of the BNP Paribas share. As a reminder, the amount awarded is subject to the application of two cumulative performance conditions over a period of five years from the date of grant. Therefore the associated performance condition (change in value of the BNP Paribas share compared to that of EURO STOXX Banks) led to 86% of the amount allocated being maintained, while the minimum performance of the BNP Paribas share during the reference period of 5%, required to trigger the payment has not been achieved.

STOCK SUBSCRIPTION OR PURCHASE OPTIONS GRANTED DURING THE YEAR TO EACH EXECUTIVE CORPORATE OFFICER BY THE ISSUER AND BY EACH COMPANY IN THE GROUP

No stock subscription or purchase options were awarded during the year to the executive corporate officers by the Company or by any other Group company.

STOCK SUBSCRIPTION OR PURCHASE OPTIONS EXERCISED DURING THE YEAR BY EACH EXECUTIVE CORPORATE OFFICER

No stock subscription or purchase options were exercised during the year by the executive corporate officers.

PERFORMANCE SHARES GRANTED DURING THE YEAR TO EACH EXECUTIVE CORPORATE OFFICER BY THE ISSUER AND BY EACH COMPANY IN THE GROUP

No performance share was granted during the year to executive corporate officers by the Company or any company in the Group.

PERFORMANCE SHARES THAT BECAME AVAILABLE DURING THE YEAR FOR EACH EXECUTIVE CORPORATE OFFICER

No performance share became available during the year for the executive corporate officers.

HISTORY OF STOCK SUBSCRIPTION AND PURCHASE OPTIONS

	Plan 9
Date of Annual General Meeting	21/05/2008
Date of Board of directors' meeting	04/03/2011
Total number of shares that can be subscribed or purchased(1), of which the number which may be subscribed or purchased by:	2,296,820
corporate officers	28,640
Jean LEMIERRE	9,980
Jean-Laurent BONNAFÉ	-
Philippe BORDENAVE	18,660
Starting point for exercising options	04/03/2015
Expiry date	04/03/2019
Subscription or purchase price(1)	56.45
Adjusted price at 31/12/2019(2)	67.74
Methods of exercising (when the plan includes several tranches)	*100% of the grant is conditional and is divided into 4 equal tranches subject to performance conditions. The exercise price may be adjusted upward according to the level of achievement of the performance conditions applicable to each tranche.*
Number of shares subscribed at 31/12/2019	-
Cumulative number of lapsed or cancelled share subscription or purchase options	28,640
Remaining share subscription or purchase options at close of year (31/12/2019)	0

(1) *The number of options and the exercise price in these plans has been adjusted for the detachment of pre-emptive subscription rights on 30 September 2009, in accordance with the regulations in force. The exercise prices in these plans do not comprise any discount.*
(2) *The performance conditions were not met in full for 1/4 of the stock subscription or purchase options awarded.*

HISTORY OF PERFORMANCE SHARE AWARDS

None.

VALUATION(1) OF THE PLURIANNUAL VARIABLE REMUNERATION PLANS (LTIP) AT THE AWARD DATE AND AT 31 DECEMBER 2019

Award date of the plan	04/02/2015		04/02/2016		06/02/2017		05/02/2018		04/02/2019		04/02/2020
Maturity date of the plan	04/02/2020		04/02/2021		06/02/2022		05/02/2023		05/02/2024		04/02/2025
Valuation(1)	At the award date of the plan	At 31/12/2019	At the award date of the plan	At 31/12/2019	At the award date of the plan	At 31/12/2019	At the award date of the plan	At 31/12/2019	At the award date of the plan	At 31/12/2019	At the award date of the plan
Jean LEMIERRE	-	-	-	-	-	-	-	-	-	-	-
Jean-Laurent BONNAFÉ	331,200	0	339,885	291,525	775,767	896,744	479,065	551,542	282,644	685,874	617,927
Philippe BORDENAVE	168,360	0	217,875	186,875	496,650	574,100	306,700	353,100	180,950	439,100	395,600
TOTAL	**499,560**	**0**	**557,760**	**478,400**	**1,272,417**	**1,470,844**	**785,765**	**904,642**	**463,594**	**1,124,974**	**1,013,527**

(1) Valuation according to the method adopted for the consolidated financial statements.

ASSUMPTIONS USED TO VALUE THE LTIP IN ACCORDANCE WITH THE METHOD ADOPTED FOR THE CONSOLIDATED FINANCIAL STATEMENTS

Valuation at award date		
Award date of the plan	05/02/2019	04/02/2020
Opening BNP Paribas share price	€40.04	48.72
Opening level of the EURO STOXX Banks index	€89.07	92.11
Zero-coupon rate	Euribor	Euribor
Volatility of the BNP Paribas share price	21.35%	19.48%
Volatility of the EURO STOXX Banks index	21.20%	18.36%
Correlation between the BNP Paribas share and the EURO STOXX Banks index	89.07%	89.77%
Financial model used	Monte-Carlo	Monte-Carlo
Fair value of the plan at award date(*)	**18.10%**	**39.56%**

(*) As a percentage of the amount awarded.

Valuation on closing date	Initial value of the share at the award date	Fair value at date of award(3)	Valuation at closing date 31/12/2018	Valuation at closing date 31/12/2019
Closing price of BNP Paribas shares			€39.475	€52.83
Closing level of the EURO STOXX Banks index			€87.04	€96.71
Zero-coupon rate			Euribor	Euribor
Volatility of the BNP Paribas share price			25.25%	20.59%
Volatility of the EURO STOXX Banks index			24.72%	21.11%
Correlation between the BNP Paribas share and the EURO STOXX Banks index			88.93%	90.37%
Financial model used			Monte-Carlo	Monte-Carlo
Fair value of the plan awarded on 4 February 2015	**€51.76(1)**	**27.60%**	**1.68%(3)**	**0.00%(3)**
Fair value of the plan awarded on 4 February 2016	**€54.07(1)**	**17.43%**	**5.54%(3)**	**14.95%(3)**
Fair value of the plan awarded on 6 February 2017	**€48.35(2)**	**49.67%**	**20.90%(3)**	**57.41%(3)**
Fair value of the plan awarded on 5 February 2018	**€63.99(2)**	**30.67%**	**14.53%(3)**	**35.31%(3)**
Fair value of the plan awarded on 5 February 2019	**€53.03(2)**	**18.10%**	**NA**	**43.91%(3)**

(1) The initial amount is the higher of the average opening price of the BNP Paribas share in the rolling 12-month period prior to the award date, and the opening BNP Paribas share price on the award date.
(2) The initial value is the average of the opening price of the BNP Paribas share for the rolling 12-month period preceding the date of grant.
(3) As a percentage of the amount awarded.

➤ DETAILED CONTRACTUAL SITUATION OF THE GROUP'S EXECUTIVE CORPORATE OFFICERS

Executive corporate officers at 31 December 2019	Employment contract		Top-up pension plan		Payments or benefits due or likely to become due upon termination or change in functions		Payment relating to a non-compete clause relating to non-complete agreements	
	Yes	No	Yes	No	Yes	No	Yes	No
Mr Jean LEMIERRE Chairman of the Board of directors		✓(1)	✓(2)			✓		✓
Jean-Laurent BONNAFÉ Director and Chief Executive Officer		✓(3)	✓(2)			✓	✓(4)	
Mr Philippe BORDENAVE Chief Operating Officer	✓(5)		✓(2)			✓		✓

(1) Waiver of employment contract with effect from 1 December 2014 in accordance with Afep-Medef Code.
(2) Jean Lemierre, Jean-Laurent Bonnafé and Philippe Bordenave are only entitled to the defined-contribution pension plan set up for all BNP Paribas (SA). employees and corporate officers, in accordance with article 83 of the French General Tax Code.
(3) Waiver of employment contract with effect from 1 July 2012.
(4) See section regarding Non-Compete Agreement.
(5) Employment contract suspended.

OTHER INFORMATION ON THE REMUNERATION OF NON-EXECUTIVE CORPORATE OFFICERS PAID OR GRANTED WITH RESPECT TO 2019, NOT SUBMITTED TO THE SHAREHOLDERS' VOTE

Remuneration and benefits awarded to the Group's non-executive corporate officers

With the exception of directors representing employees, only the remuneration detailed in "Remuneration of directors" on page 78 of this document are paid to non-executive corporate officers.

Remuneration and benefits awarded to directors representing the employees

Total remuneration paid in 2019 to Directors elected by employees amounted to EUR 111,368 (EUR 108,077 in 2018), excluding remuneration for their directorship. Remuneration linked to their directorships paid in 2019 to Directors representing employees amounted to EUR 174,219 (EUR 152,298 in 2018). These sums were paid directly to the trade union bodies of the directors concerned.

Directors representing employees are entitled to the same death/disability benefits and the same *Garantie Vie Professionnelle Accidents* benefits as all BNP Paribas (SA) employees, as well as medical benefits. The total amount of premiums paid into these schemes by BNP Paribas in 2019 on behalf of employee-elected Directors was EUR 1,704 (EUR 1,658 in 2018).

Directors representing employees belong to the defined-contribution pension plan (article 83 of the French General Tax Code) set up for all BNP Paribas (SA) employees. The total amount of contributions paid by BNP Paribas to the scheme in 2019 on behalf of these corporate officers was EUR 1,233 (EUR 1,204 in 2018). They are also entitled, if applicable, to top-up banking industry pensions under the industry-wide agreement that entered into force on 1 January 1994.

SUMMARY OF TRANSACTIONS REPORTED ON BNP PARIBAS STOCK

The following table lists the transactions in BNP Paribas stock carried out in 2019 by the corporate officers covered by article L.621-18-2 of the French Monetary and Financial Code and which must be disclosed pursuant to articles 223-22 A to 223-26 of the General Regulation of the AMF.

Full name Function	Transactions carried out	Type of financial instrument	Nature of the transaction	Number of transactions	Amount of transactions *(in euros)*
BONNAFE Jean-Laurent	On a personal basis	BNP Paribas Equities	Purchase	6	511,361
de CHALENDAR Pierre André	On a personal basis	BNP Paribas Equities	Purchase	1	79,808
GIBSON BRANDON Rajna	On a personal basis	BNP Paribas Equities	Purchase	1	50,090

2.1.4 OTHER INFORMATION

1 INFORMATION ON SHARE SUBSCRIPTION OR PURCHASE OPTIONS AND PERFORMANCE SHARES

The Company did not grant any instruments to non-corporate officer employees in 2019.

No instruments were transferred or exercised in 2019, for the benefit of non-corporate officer employees.

2 LOANS, ADVANCES AND GUARANTEES GRANTED TO THE GROUP'S CORPORATE OFFICERS

At 31 December 2019, total outstanding loans granted directly or indirectly to corporate officers amounted to EUR 4,775,072 (EUR 7,094,958 at 31 December 2018). This represents the total amount of loans granted to BNP Paribas' corporate officers and their spouses. These loans representing normal transactions were carried out on an arm's length basis.

3 TABLE OF DELEGATIONS

Resolutions adopted at Shareholders' General Meetings valid for 2019

The following delegations to increase or reduce the share capital have been granted to the Board of Directors under resolutions approved by Shareholders' General Meetings and were valid during 2019:

Resolutions adopted at Shareholders' General Meetings		Use of authorisation in 2019
Shareholders' Combined General Meeting of 24 May 2018 (5th resolution)	Authorisation given to the Board of directors to set up a share buyback programme for the Company up to a maximum of 10% of the shares comprising the share capital. Said acquisitions of shares, at a price not exceeding EUR 73 per share (previously EUR 73), would be intended to fulfil several objectives including: ■ fulfilling obligations arising from the issue of securities giving access to capital, stock option programmes, the award of free shares, the award or selling of shares to employees in connection with the employee profit-sharing scheme or company savings plans, and all forms of share grants to employees and/or officers of BNP Paribas and the companies controlled exclusively by BNP as defined in article L. 233-16 of the French Commercial Code; ■ cancelling shares in accordance with conditions set by the Shareholders' Combined General Meeting of 24 May 2018 (26th resolution); ■ holding and subsequently remitting them in exchange or payment for external growth transactions, mergers, spin-offs or asset contributions; ■ holding them in connection with a market-making agreement complying with the Code of Ethics recognised by the AMF (French Securities Regulator); ■ and carrying out investment services for which BNP Paribas is authorised or to hedge them. This authorisation was granted for a period of 18 months and replaces that granted by the 5th resolution of the Shareholders' Combined General Meeting of 23 May 2017.	Under the market-making agreement, 148,301 shares with a par value of EUR 2 were acquired and 245,666 shares with a par value of EUR 2 were sold between 25 May 2018 and 31 December 2018
Shareholders' Combined General Meeting of 24 May 2018 (19th resolution)	Capital increase, with preferential subscription rights maintained, through the issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued. The nominal amount of capital increases that may be carried out immediately and/or in the future, by virtue of this authorisation, may not exceed EUR 1 billion (*i.e.* 500 million shares). This authorisation was granted for a period of 26 months and replaces that granted by the 16th resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 24 May 2018 (20th resolution)	Capital increase, without preferential subscription rights, by issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued. The nominal amount of capital increases that may be carried out, immediately and/or in the future, by virtue of this authorisation, may not exceed EUR 240 million (*i.e.* 120 million shares). This authorisation was granted for a period of 26 months and replaces that granted by the 17th resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 24 May 2018 (21st resolution)	Capital increase, without preferential subscription rights, through the issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued intended to remunerate contributions of securities up to 10% of the share capital. The nominal amount of capital increases that may be carried out on one or more occasions, by virtue of this authorisation, may not exceed 10% of the share capital of BNP Paribas as at the date of the decision of the Board of Directors. This delegation was given for a period of 26 months and replaces that granted by the 18th resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period

Resolutions adopted at Shareholders' General Meetings		Use of authorisation in 2019
Shareholders' Combined General Meeting of 24 May 2018 (22nd resolution)	Overall limit on authorisations to issue shares without preferential subscription rights for existing shareholders. The maximum overall amount for all issues with or without preferential subscription rights for existing shareholders carried out immediately and/or in the future may not exceed EUR 240 million for shares by virtue of the authorisations granted under the 20th and 21st resolutions of this Shareholders' Combined General Meeting of 24 May 2018.	Not applicable
Shareholders' Combined General Meeting of 24 May 2018 (23rd resolution)	Capital increase by capitalising reserves, retained earnings, additional paid-in capital or contribution premium. Authorisation was given to increase the share capital up to a maximum amount of EUR 1 billion on one or more occasions, by capitalising all or part of the reserves, profits or additional paid-in capital, merger or contribution premiums, successively or simultaneously, through the issuance and award of free shares, through an increase in the par value of existing shares, or through a combination of these two methods. That authorisation was granted for a period of 26 months and replaces that granted by the 20th resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 24 May 2018 (24th resolution)	Overall limit on authorisations to issue shares with or without preferential subscription rights for existing shareholders. The maximum overall amount for all issues with or without preferential subscription rights for existing shareholders carried out immediately and/or in the future may not exceed EUR 1 billion for shares by virtue of the authorisations granted under the 19th to 21st resolutions of this Shareholders' Combined General Meeting of 24 May 2018.	Not applicable
Shareholders' Combined General Meeting of 24 May 2018 (25th resolution)	Authorisation granted to the Board of directors to carry out transactions reserved for members of the BNP Paribas Group's Company Savings Plan in the form of new share issues and/or sales of reserved shares. Authorisation was given to increase the share capital within the limit of a maximum nominal amount of EUR 46 million on one or more occasions by issuing ordinary shares (without preferential subscription rights for existing shareholders), reserved for members of the BNP Paribas Group's Company Savings Plan, or by selling of shares. This authorisation was granted for a period of 26 months and replaces that granted by the 22nd resolution of the Shareholders' Combined General Meeting of 26 May 2016.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 24 May 2018 (26th resolution)	Authorisation granted to the Board of directors to reduce share capital by cancelling shares. Authorisation is given to cancel, on one or more occasions, through reduction of the share capital, all or some of the shares that BNP Paribas holds and that it could hold, up to a maximum of 10% of the total number of shares constituting the share capital existing as at the date of the transaction, for a period of 24 months. Delegation of all powers to carry out this reduction in share capital, and allocate the difference between the purchase price of the cancelled shares and their nominal value to share premium and retained earnings, including the legal reserve up to 10% of annual share capital. That authorisation was granted for a period of 18 months and replaces that granted by the 17th resolution of the Shareholders' Combined General Meeting of 23 May 2017.	This authorisation was not used during the period

Resolutions adopted at Shareholders' General Meetings		Use of authorisation in 2019
Shareholders' Combined General Meeting of 23 May 2019 (5th resolution)	Authorisation given to the Board of directors to set up a share buyback programme for the Company up to a maximum of 10% of the shares comprising the share capital. Said acquisitions of shares, at a price not exceeding EUR 73 per share (previously EUR 73), would be intended to fulfil several objectives including: ■ fulfilling obligations arising from the issue of securities giving access to capital, stock option programmes, the award of free shares, the award or selling of shares to employees in connection with the employee profit-sharing scheme or company savings plans, and all forms of share grants to employees and/or officers of BNP Paribas and the companies controlled exclusively by BNP as defined in article L. 233-16 of the French Commercial Code; ■ cancelling shares in accordance with conditions set by the Shareholders' Combined General Meeting of 23 May 2019 (17th resolution); ■ holding and subsequently remitting them in exchange or payment for external growth transactions, mergers, spin-offs or asset contributions; ■ holding them in connection with a market-making agreement complying with the decision of AMF (French Securities Regulator) n°2018-01 of 2 July 2018; ■ and carrying out investment services for which BNP Paribas is authorised or to hedge them. That authorisation was granted for a period of 18 months and replaces that granted by the 5th resolution of the Shareholders' Combined General Meeting of 24 May 2018.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 23 May 2019 (17th resolution)	Authorisation granted to the Board of directors to reduce share capital by cancelling shares. Authorisation is given to cancel, on one or more occasions, through reduction of the share capital, all or some of the shares that BNP Paribas holds and that it could hold, up to a maximum of 10% of the total number of shares constituting the share capital existing as at the date of the transaction, for a period of 24 months. Delegation of all powers to carry out this reduction in share capital, and allocate the difference between the purchase price of the cancelled shares and their nominal value to share premium and retained earnings, including the legal reserve up to 10% of annual share capital. That authorisation was granted for a period of 18 months and replaces that granted by the 26th resolution of the Shareholders' Combined General Meeting of 24 May 2018.	This authorisation was not used during the period

4 ITEMS LIKELY TO HAVE AN IMPACT IN THE EVENT OF A PUBLIC TENDER OR EXCHANGE OFFER (ARTICLE L.225-37-5 OF THE FRENCH COMMERCIAL CODE)

Among the items referred to in article L. 225-37-5 of the French Commercial Code, there is no element likely to have an impact in the event of a public tender or exchange offer.

2.2 Statutory Auditor's report, prepared in accordance with article L.225-35 of the French Commercial Code, on the Board of directors' report on corporate governance

The observations required by Article L. 225-235 of the French Commercial Code are covered in the Statutory Auditor's report on the annual financial statements (Chapter 6.6).

2.3 The Executive Committee

At 4 February 2020 the BNP Paribas Executive Committee had the following members:

- **Jean-Laurent Bonnafé**, Director and Chief Executive Officer;
- **Philippe Bordenave**, Chief Operating Officer;
- **Jacques d'Estais**, Deputy Chief Operating Officer; International Financial Services;
- **Michel Konczaty**, Deputy Chief Operating Officer;
- **Thierry Laborde**, Deputy Chief Operating Officer; Domestic Markets;
- **Yann Gérardin**, Deputy Chief Operating Officer; Corporate and Institutional Banking;
- **Marguerite Berard**, Head of French Retail Banking;
- **Laurent David**, Chief Executive Officer of BNP Paribas Personal Finance;
- **Stefaan Decraene**, Head of International Retail Banking;
- **Renaud Dumora**, Chief Executive Officer of BNP Paribas Cardif;
- **Nathalie Hartmann**, Head of the Compliance Function;
- **Maxime Jadot**, Director and Chief Executive Officer and Chairman of the Management Committee of BNP Paribas Fortis;
- **Yves Martrenchar**, Head of Human Resources;
- **Andrea Munari**, General Manager and Chief Executive Officer of BNL;
- **Alain Papiasse**, Chairman of Corporate and Institutional Banking;
- **Eric Raynaud**, Head of the Asia-Pacific region;
- **Frank Roncey**, Head of RISK Management;
- **Antoine Sire**, Head of Corporate Engagement;
- **Thierry Varène**, Global Head for Large Clients.

The Executive Committee of BNP Paribas has had a permanent Secretariat since November 2007.

2.4 Internal control

The following information relating to internal control has been provided by the Group's Executive Management. The Chief Executive Officer shall be responsible for the organisation and procedures of internal control and for all information required by French law regarding the internal control report. This document is based on the information provided by the Compliance, Risk, Finance, Legal and General Inspection Functions. It has been approved by the Board of directors.

BNP PARIBAS' INTERNAL CONTROL STANDARDS

The principles and procedures for the internal control of banking activities in France and abroad are at the heart of banking and financial regulations and are subject to numerous legislative and regulatory provisions.

The main text applicable to BNP Paribas is the Ministerial Order of 3 November 2014. This text sets out the conditions for the implementation and monitoring of internal control in credit institutions and investment firms, in compliance with the European Directive CRD 4. In particular, it specifies the principles relating to internal transaction control systems and procedures, organisation of accounting and information processing, risk and result measurement systems, risk monitoring and control systems, and the information and documentation system for internal control. article 258 of the Order provides for the drafting for the Board of directors of an annual regulatory report on the conditions under which internal control is implemented.

This Order requires BNP Paribas to have an internal control system (hereinafter Internal control) comprising specific departments and persons responsible for permanent control (including the Compliance and Risk Functions) and periodic control. This system must also take into account, as appropriate, the general regulation of the AMF, the regulations applicable to foreign branches and subsidiaries and to specialised activities such as portfolio management and insurance, and the recommendations of leading international bodies dealing with issues related to the prudential regulation of international banks, first and foremost the Basel Committee, the Financial Stability Board, the European Authorities, the European Securities and Markets Authority, the European Central Bank and the French *Autorité de contrôle prudentiel et de résolution*.

DEFINITION, OBJECTIVES AND STANDARDS OF INTERNAL CONTROL

The BNP Paribas Group's Executive Management has implemented an internal control system whose main purpose is to ensure overall control of the risks and to provide reasonable assurance that the Company's objectives in this respect are achieved.

BNP Paribas' internal control charter (reworked and updated in 2017) specifies the framework of this system and constitutes BNP Paribas' basic internal control framework. Widely distributed within the Group and accessible to all its employees, this charter firstly recalls the objectives of internal control, which aims to ensure:

- a sound and prudent risk management approach, aligned with BNP Paribas' values and code of conduct in conjunction with the policies outlined in its corporate social responsibility framework;
- operational security of BNP Paribas' internal operations;
- the relevance and reliability of accounting and financial information;
- compliance with laws, regulations and internal policies.

Its implementation requires, in particular, that a culture of high-level risk and ethics be promoted to all employees and in BNP Paribas' relations with third parties, clients, intermediaries or suppliers as well its shareholders.

The charter then sets out the rules governing the organisation, responsibility and scope of operations of the various internal control entities and establishes the principle according to which the control functions (Compliance, Legal, Risk and General Inspection in particular) execute these controls independently.

SCOPE OF INTERNAL CONTROL

The BNP Paribas Group's internal control is overarching:

- it covers all types of risks to which the Group may be exposed (credit and counterparty risk, market risk, liquidity risk, interest rate risk in the banking book, underwriting risk with respect to insurance, operational risk, risk of non-compliance, equity risk, etc.);
- it is applied at the Group level and at the level of directly or indirectly controlled entities, irrespective of their line of business and irrespective of whether they are consolidation status. For other entities (in particular, legal entities subject to significant influence), the Group's representatives on the corporate bodies of these entities are strongly encouraged to promote the same standards of internal control;
- it also covers the use of outsourced services, in accordance with principles defined by regulation.

FUNDAMENTAL PRINCIPLES OF INTERNAL CONTROL

BNP Paribas' internal control system is based on its values and the code of conduct as well as the principles of the following additional actions:

- clearly identified responsibilities: internal control is the responsibility of every employee, irrespective of their seniority or responsibilities. The exercise of a managerial function carries the additional responsibility of ensuring the proper implementation of the internal control system within the scope subject to regulation. In this framework, the necessary responsibilities and delegations must be clearly identified and communicated to all stakeholders;

- a structured risk identification, assessment and management system (involving, among others, a decision-making system, delegation, organisational principles, controls, reporting and alert mechanism, etc.);
- control and oversight that is independent of risk: the Heads of the operational activities have the ultimate responsibility for those risks created by their activities, and as such, the foremost responsibility of implementing and operating a system that identifies, assesses and manages risk. The internal control system provides for mandatory intervention, and as early as possible, of functions exercising independent control under a second level of control. This intervention takes the following forms:
  - defining the overall normative framework for risk identification, assessment and management,
  - defining cases where a second prior review by a function exercising a second-level control shared with the operational entity is necessary for decision-making,
  - independent controls, called second-level controls, carried out by said function on the system implemented by the Heads of the operational activities and on their operation (result of the risk identification and assessment process, relevance and compliance of the risk control systems and in particular, compliance with the limits set);
- separation of duties: this is a key element of the risk control system. It consists of assigning certain operational tasks that contribute to the performance of a single process to stakeholders at various hierarchical levels or to separate these tasks by other means, in particular by electronic means. Thus, for example, tasks related to transaction initiation, confirmation, accounting, settlement and accounts reconciliation must be performed by different parties;
- proportionality of risks: the internal control system must be implemented under an approach and with an intensity that is proportionate to the risks involved. This proportionality is determined based on one or more criteria:
  - risk intensity as identified in the context of assessment programmes ("Risk ID", RCSA, etc.),
  - amount of allocated capital and/or ratios in terms of solvency and liquidity,
  - criticality of activities with regard to systemic issues,
  - regulatory conditions governing the exercise of business activities, size of business activities carried out,
  - customer type and distribution channels,
  - complexity of the products designed or marketed and/or services provided,
  - complexity of the processes carried out and/or the level of use of outsourcing with internal/external entities of the Group,
  - sensitivity of the environment where the activities are located,
  - legal form and/or presence of minority shareholders;
- appropriate governance: the internal control system is subject to governance involving the different stakeholders and covering the various aspects of internal control, both organisational and monitoring and oversight; the internal control committees are a key instrument in this system; the system is part of the decision-making processes managed through a system of delegations in the management reporting lines. They may involve the input of a third party belonging to another reporting line, whenever the systems defined by the Operational Entities and/or the functions exercising a second-level control so provide. The escalation process allows for disagreements between the operational entities and functions exercising second-level control, especially those related to decision-making, to be escalated to the higher hierarchical and possibly functional levels, to which the two parties report, and at the end, when these disputes cannot be resolved in this way, to arbitration conducted by the Group's Executive Officers. This process is implemented in accordance with the powers conferred to the Group Risk Officer, who may exercise his right of veto under the conditions set out in the Risk charter;
- a requirement for formalisation and traceability: Internal Control relies on the instructions of Executive Officers, written policies and procedures and audit trails. As such, the controls, their results, their implementation and the feedback from the entities to the higher levels of the Group's governance are documented and traceable;
- a duty of transparency: all Group employees, irrespective of their position, have a duty to communicate, in a transparent manner, that is, spontaneously and promptly, to a higher level within the organisation to which they belong:
  - any information required for a proper analysis of the situation of the entity in which the employee operates, and which may impact the risks or the reputation of the entity or the Group,
  - any question that the employee could not resolve independently in the exercise of his duties,
  - any anomaly of which he becomes aware.

  In addition, he has a duty to alert, confidentially, as provided for by the Group code of conduct and exercised within the framework of the whistleblowing system established by Compliance;
- a human resources management taking into account internal control objectives: the internal control objectives to be considered in employee career management and remuneration (including: as part of the employee evaluation process, training, recruitment for key positions, and in determining remuneration);
- continuous adaptation of the system in response to changes: the internal control system must be actively managed by its various stakeholders. This adjustment in response to changes of any kind that the Group must face must be done according to a periodic cycle defined in advance but also continuously as soon as events so justify.

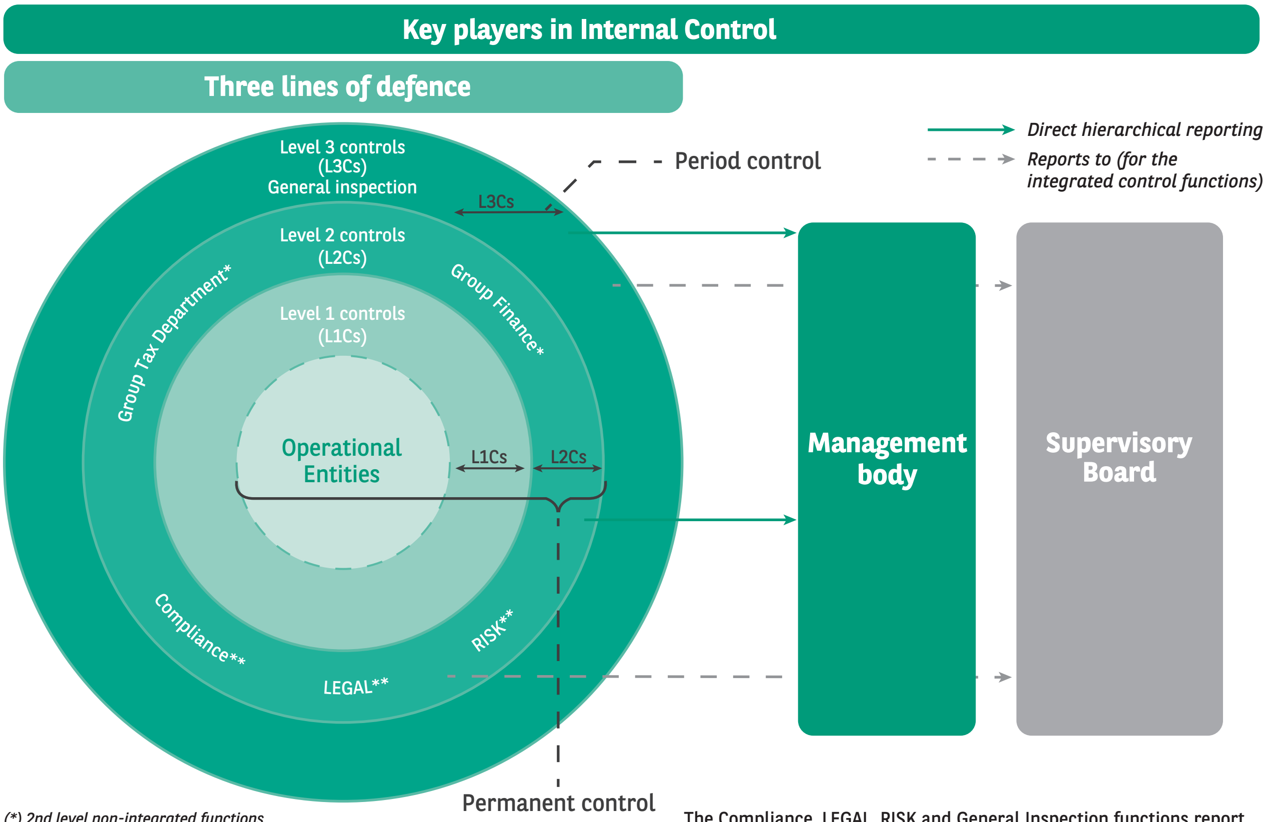
Compliance with these principles is verified on a regular basis, in particular through assignments carried out by the periodic control teams (General Inspection).

ORGANISATION OF INTERNAL CONTROL

BNP Paribas Group's internal control system is organised around three lines of defence, under the responsibility of Executive Officers and under the oversight of the Board of directors.

Permanent control is the ongoing implementation the risk management system and is provided by the first two lines of defence. Periodic control, provided by the third line of defence, is an audit and assessment function that is performed according to a clean audit cycle.

The functions exercising the second and third lines of defence are so-called Functions exercising independent control. They report directly to the Executive Officers and with respect to Compliance, Legal, Risk and General Inspection, they report on the performance of their duties to the Board of directors.



(*) 2nd level non-integrated functions
(**) 2nd level integrated functions

The Compliance, LEGAL, RISK and General Inspection functions report on the performance of their duties to the Board of directors.

KEY PLAYERS IN INTERNAL CONTROL

- The operational entities are the first line of defence: the operational entities are primarily responsible for managing their risks and are the front-line in permanent control. They act within the framework defined by the Group's Executive Officers and reviewed by its Board of directors, transcribed in the form of policies and procedures and to the extent necessary, tailored by the corporate bodies of the Group's entities.
- The risk control system operated by the first line of defence forms what is called the first-level control system. It is implemented by employees and/or their reporting line and/or control teams that do not operate the processes under their control.

The operational entities cover:

- all Operating divisions and Business Lines, whether these concern profit-centre entities and their associated support functions, or all entities of Domestic Markets, International Financial Services and Corporate & Institutional Banking;
- all cross-divisional functions, including the control functions for the processes that they operate directly and not under the responsibility of the second line of defence;
- all the Territories, attached to an operating division.

- The functions exercising second-level control (second line of defence):
  - functions exercising second-level control are responsible, under the delegation given by the Executive Officers, for the organisation and functioning of the risk control system and its compliance with laws and regulations on a range of areas (subjects and/or processes), as defined in their responsibility charter;
  - as such, in their field of expertise and, where appropriate, after having consulted the operational entities, they define the general normative framework in which the risk management under their responsibility is to be carried out, the methods of their intervention (thresholds, delegations, escalation, etc.), implement this system in those aspects that concern them and for which they are responsible, in their area of expertise, for first-level and second-level permanent control. They challenge and provide an independent view of risk identification and assessment *vis-à-vis* operational entities. They also contribute to spreading a culture of risk and ethics within the Group;
  - those responsible for these functions provide the Executive Officers and Board of directors with a reasoned opinion on the level of risk control, current or potential, in particular regarding the "Risk Appetite Statement" as defined and propose any actions for improvement that they deem necessary;

- the Head of a function performing a second level control performs this mission by relying on teams that can be placed:
  - either under its direct or indirect hierarchical responsibility, where the function is then called integrated. It thus has full authority over its budget and the management of its human resources,
  - or under its direct or indirect functional responsibility (so-called non-integrated function) subject to joint decision-making with the reporting line manager for Human Resources and budget.

The three integrated functions exercising second-level control are:

- Risk, in charge of organising and overseeing the overall system for controlling those risks to which the BNP Paribas Group is exposed, particularly credit risk and counterparty risk, market risk, funding and liquidity risk, interest rate and exchange rate risk in the banking book, insurance risk and operational risk. The Head of Risk is also the Head of Permanent Control, responsible for the consistency and proper functioning of the permanent control system within the BNP Paribas Group;
- Compliance, responsible for organising and overseeing the non-compliance risk control system. As such, it contributes to the permanent control of compliance with laws and regulations, professional and ethical standards and the guidelines of the Board of directors and the instructions of the Executive Management;
- Legal, responsible for organising and overseeing the legal risk control system, exercises its responsibility to prevent and manage legal risks through its advisory and control roles. It exercises this control by (i) monitoring the implementation of legal opinions issued for the purpose of avoiding or mitigating the effects of a major legal risk and (ii) first and second level control exerted on the legal processes. The missions entrusted to this function are performed independently of the business activities and support functions. The function is integrated hierarchically under the sole authority of its Department head, *i.e.* "Group General Counsel," who reports to the Chief Executive Officer.

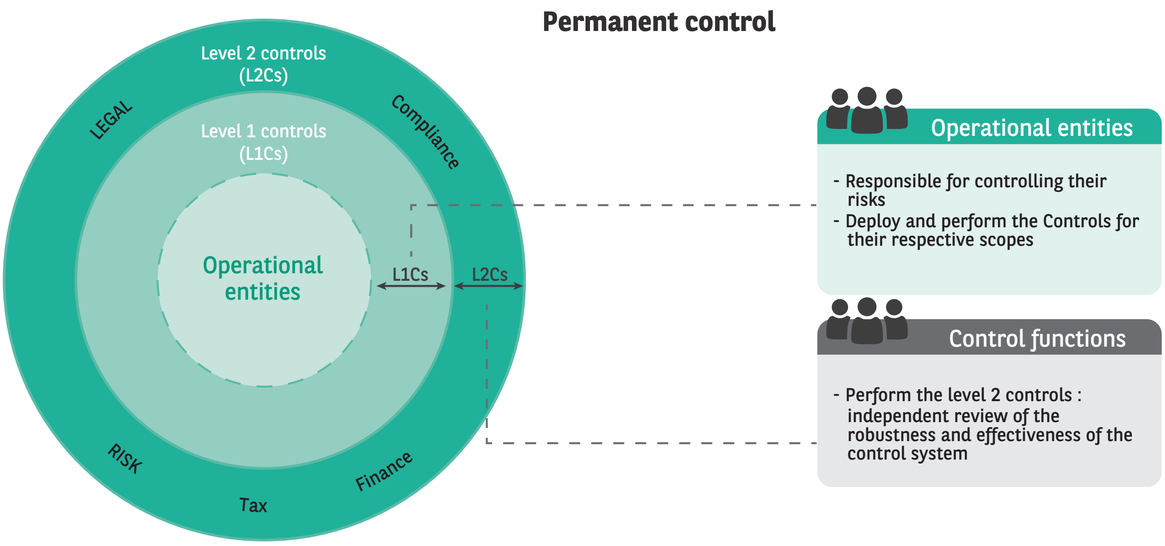
The Heads of these functions may be heard by the Board or any of its specialised committees, directly, possibly without the presence of Executive Officers, or at their request.

The two non-integrated functions exercising a second-level control are:

- Group Tax Department, as part of the organisation of the Group's tax risk control system and its contribution to its implementation;
- Group Finance, under its responsibility in defining and implementing the risk control system related to accounting and financial information.

The appointment of the Heads of the Compliance, Finance and Risk Functions falls within the framework defined by the European Banking Authority.

Permanent control can be outlined as follows:



- General Inspection (third line of defence): the General Inspection is responsible for periodic control, performs the Internal Audit Function and contributes to the protection of the Group by independently acting as its third line of defence on all Group entities and in all areas. It includes:
  - centrally based inspectors who carry out their duties throughout the Group;
  - auditors distributed in the geographical or business line platforms (called "hubs").

  The Inspector General, responsible for periodic controls, reports to the Chief Executive Officer.
- Executive Officers: the Chief Executive Officer and the Chief Operating Officer ensure the effective management of the Company for regulatory and legal purposes. In practice, the Executive Officers make key decisions through specialised committees that allow them to rely on experts with a deep understanding of the issues to be addressed.

  Executive Directors are responsible for the internal control system as a whole. As such and notwithstanding the powers of the Board of directors, the Executive Officers:
  - decide on the key policies and procedures serving as the basis for this system;
  - directly oversee the functions exercising independent control and provide them with the means to allow them to fulfil their responsibilities effectively;
  - define the Group's risk-taking policies, validate the most important decisions in this area and, if necessary, make the final decisions in the context of the escalation process. This process is implemented in accordance with the powers conferred to the Group Risk Officer, who may exercise his right of veto under the conditions set out in the Risk charter;
  - periodically evaluate and monitor the effectiveness of the internal control policies, systems and procedures and to implement the appropriate measures to remedy any deficiencies;
  - receive the main reports on internal control within the Group;
  - report to the Board of directors or its relevant committees on the operation of this system.
- The Board of directors: the Board of directors exercises directly or through specialised committees (Financial Statements Committee, Internal Control, Risk Management and Compliance Committee, Corporate Governance, Ethics, Nominations and CSR Committee, etc.) key responsibilities in terms of internal control. Among others, the Board of directors:
  - determines, on the proposal of the Executive Officers, the strategy and guidelines of the internal control activity and ensures their implementation;
  - reviews the internal control activity and results at least twice per year;
  - regularly reviews, assesses and verifies the effectiveness of the governance system, including in particular, clearly defined responsibilities, and internal control, including in particular risk reporting procedures, and taking appropriate measures to remedy any failings uncovered;
  - validates the "Risk Appetite Statement", approve and periodically review the strategies and policies for taking up, managing, monitoring and controlling risks and approves their overall limits.

The organisation of the Board of directors and its specialised committees is defined through its Internal rules. The Heads of General Inspection and the integrated functions exercising second-level control have the right to be heard, possibly without the presence of Executive Officers, by the Board of directors or one of its specialised committees.

Finally, among the specialised committees, the Internal Control, Risk Management and Compliance Committee (CCIRC) is essential in the Group's internal control system. Indeed, it assumes the following responsibilities:

- analyses reports on internal control and on risk measurement and monitoring, reports on the activities of the General Inspection, and significant correspondence with the main regulators;
- examines the strategic directions of the risk policy;
- reports to the Board of directors.

COORDINATION OF INTERNAL CONTROL

At the consolidated level, the coordination of internal control is ensured by the Group Supervisory & Control Committee, which is responsible, in particular, for ensuring consistency and coordination in the internal control system. It meets on a bi-monthly basis and brings together the Executive Officers, the Deputy Chief Executive Officer and the Heads of the integrated functions. The Deputy Chief Operating Officers overseeing an operating division have standing invitations to attend.

In those entities and territories that are significant for the Group, their Executive Officers are responsible for arranging this coordination, generally within the framework of the Internal Control Committees.

PROCEDURES

The procedures are one of the key elements of the permanent control system alongside the identification and assessment of risks, controls, reporting and monitoring of the control system.

Written guidelines are distributed throughout the Group and provide the organisation and procedures to be applied as well as the controls to be applied. These procedures constitute the basic framework for internal control. The Risk Function, as part of the oversight of the permanent control system, regularly monitors the completeness of the procedures' guidelines. The Group's cross-functional procedures framework (levels 1 and 2) is regularly updated through contributions from all divisions and functions. Regarding the control framework, investigations into the status of the system are included in the semi-Annual Report on permanent control.

Among the Group's cross-functional procedures, applicable in all entities, risk control is critically important in:

- the procedures that govern the process for approving exceptional transactions, new products and new activities;
- the procedure for approving credit and market transactions;

- the procedures in terms of compliance with embargoes and anti-money laundering.

These processes rely primarily on committees (Exceptional Transactions Committees, New Activities and Products Committees, Credit Committees, etc.) mainly covering, on the one hand, operational and related functions such as IT and Operations, and on the other, the control functions (Risk, Compliance, Finance, and Legal and Tax Functions), which take a "second-look" on transactions. In the event of a dispute, they are submitted to a higher level of the organisation. Leading this process are the committees (Credit, Market Risk, Risk Policy Committees, etc.) chaired by members of the Executive Management.

2019 HIGHLIGHTS

In 2019, the Compliance Function was focused on the following issues in particular:

- In terms of financial security, in continuation of the work started in 2018, the implementation of the remediation plan relating to international sanctions, the reinforcement of the Anti-Money Laundering/Combatting the Financing of Terrorism (AML/CFT) system and the deployment of the programme to ensure compliance with the anti-corruption provisions of the "Sapin 2" law of 9 December 2016;
- Completing the "ownership" by the businesses of the different elements of the Code of conduct, with Compliance having, henceforth, a supervisory role;
- The application of controls relating to the implementation of the MiFID 2 regulations and arrangements for reporting to senior management.

With regards to the other elements of operational risk, cyber threats remained high in 2019. As a result, the relevant teams throughout the Group continued to strengthen the Group's system to protect, detect and control such threats. Significant work was also completed in terms of IT continuity, in particular as part of an action plan following incidents in January and March 2019.

COMPLIANCE

Integrated globally since 2015, Compliance brings together all Group employees reporting to the function.

Compliance is organised based on its guiding principles (independence; integration and decentralisation of the function; dialogue with the business lines; a culture of excellence) through three operating areas, two regions, five fields of expertise and three cross-functional activities.

All Compliance Officers in the various operational areas, regions, business lines and territories, fields of expertise and Group functions report directly to the Compliance Function.

The Compliance workforce increased by 5% compared to 2018 to reach 4,378 full-time equivalent (FTE) employees at the end of 2019.

Compliance continued to oversee the implementation of remediation plans initiated as part of its agreements with the authorities in France and the United States regarding international financial and foreign exchange sanctions. This plan has been largely implemented.

In 2019, for example, the Compliance Function's activity resulted in the following developments:

- in terms of financial security, the fourth annual audit was undertaken by the independent consultant of the Fed and the ACPR to verify the Group's compliance with the commitments made to its two supervisory authorities. It took place between August and the end of October 2019, and concluded with a report published on 20 December which set out the progress made;
- the review by the independent consultant of the Department of Financial Services of New York ("DFS") also took place in 2019. This covered the customer data screening tools and processes, the list management processes and tools, and BNP Paribas New York's new Anti-Money Laundering/Terrorist Financing Tool. The first joint quarterly report prepared by BNP Paribas and the independent consultant was presented to the DFS in November 2019, detailing the improvements made in governance and progress on the projects covered by the review;
- the significant IT developments made to the central screening tools for client names and management of sanction lists were reiterated by the independent consultants in the respective report. Efforts will continue in this area in 2020;
- the bank strengthened the Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) and asset freezing system by updating several key elements of its regulatory framework. The operational implementation of the new standards on transaction monitoring and the management of AML/CFT alerts defined in 2017 has been completed since the end of 2019 in most of the Group's entities;
- in the area of "Know Your Client", or KYC, all business lines continued to implement the Group's policies and to improve operational efficiency. These projects are regularly monitored by the Executive Management;
- BNP Paribas' system for the prevention and management of corrupt practices continues to be further strengthened further following the publication of the "Sapin 2" law of 9 December 2016. Governance arrangements have been consolidated by the increased involvement of contact points in the businesses and functions, the methodology of corruption risk mapping has been reviewed and improved to cover the additional processes (supplier awareness, lobbying and governance), training on awareness of corruption risks has been completed by all employees, diligence policies with respect to third parties have been reinforced, the disciplinary process clarified and a number of awareness and communication initiatives have been launched to increase everyone's commitment to combating corruption;
- improvement of the whistleblowing system continued: an internal communication was sent to all Group employees in the middle of 2019; alerts are treated consistently, thanks to the dissemination of rules and the creation of a dedicated forum for the whistleblowing alert officers responsible for receiving and processing alerts; the documentation for the system's level 1 control plan and the review of level 2 controls have been completed;
- compliance with the "Benchmark Regulation" (BMR) for all business activities undertaken by BNP Paribas as an administrator, contributor or user of benchmarks, and compliance with the principles of the IOSCO;

- compliance with the foreign exchange Code of Conduct of the Bank for International Settlements;
- the implementation of systems relating to client tax regulations (Foreign Account Tax Compliance Act (FATCA), the Automatic Exchange of Information (AEOI) for tax purposes system or the "Qualified Intermediary" scheme concerning the taxation at source of American securities) has been strengthened, in particular, by implementing an annual internal FATCA/QI certification process, drafting specific procedures, training employees about these regulations and deploying adequate controls at first and second level. Moreover, the first certification for QI compliance for the 2014-2017 period was sent to the IRS before the deadline in February 2019;
- the strengthening of systems relating to the implementation of banking laws continued in 2019 (French banking law, American Volcker Rule and CFTC Swap Dealer) and the associated changes were integrated (decree of 18 March 2019 under the French banking law and Volcker 2.0).

Training in compliance issues remains a priority for the Group. Thus, at 31 December 2019, more than 94% of relevant employees completed online training on international sanctions and embargoes and on combating money laundering and the financing of terrorism.

Improvement of the permanent control mechanism for compliance continued in 2019, and it was aligned with the Risk ORC system in terms of standards, methodologies and tools, and the businesses were given increased responsibility (as the first line of defence) in managing compliance risks. In this context, the objective of the Compliance Function is to continue to consolidate and reinforce its supervisory role, by increasingly using permanent control measures as a first line of defence and supporting the businesses during this transformation phase, while guaranteeing compliance at all times with the Group's regulatory obligations in the area of compliance.

The automation process passed another important milestone by refocusing on the end-to-end management of compliance processes. This involved the gradual implementation of a new organisational structure with a greater focus on new technologies (data analysis, AI, etc.) and the creation of a "process leader" role for four workstreams: "names screening and payment filtering", "anti money laundering", "market integrity, Client Interest Protection and professional ethics" and "risk and controls". Project management activities have been transferred to the Group IT Function.

Finally, data governance was strengthened with the appointment of a manager reporting directly to the Head of Automation.

2020 will see the continuance of the different projects launched. The Compliance Function must face the twin challenge of closely managing its risks and of efficiency. With regards to this last point, the ability to industrialise and automate these processes by relying on new technologies is particularly important.

LEGAL

In 2019, the Legal Function continued to strengthen its legal risk management system, in particular through:

- Improving governance:
  - increasing employee numbers in the Legal Risk Oversight team (within the Legal COO) dedicated to developing the permanent control system;
  - strengthening the system for anticipating legal risks by the Legal Risk Anticipation Department in particular by increasing employee numbers;
  - review of the target operating model for the regulatory monitoring applicable to all the functions involved in the monitoring process.
- The Legal Function has had a number of achievements in terms of legal risk management, notably:
  - the taxonomy of legal risks, aligned with that of the Group, was approved by the GORC (Group Operational Risk Committees);
  - the Legal Function's generic control plan was updated, implemented by the first line of defence within the Legal Function and is supplemented by the deployment of second level controls over legal processes;
  - the implementation of procedures relating to regulatory monitoring at Group and Legal Function level;
  - definition of a mission letter for the Territory legal officers and the Business line legal officers;
  - entry into operation, in June 2019, of a single legal risks reporting tool;
  - roll-out of a mandatory module for training and raising employee awareness of competition law;
  - roll-out of a mandatory employee awareness module on personal data protection in the context of the European General Data Protection Regulation;
  - implementation of a legal digital expertise plan focusing on the increasing importance of digital legal expertise. Its major focus is the development of a skills centre for training corporate lawyers on the legal issues relating to digitalisation, in order to support the Group with its transformation plan and to understand these new issues;
  - call for tenders issued to select an application-based market solution for "Matter Management" (second quarter 2019);
  - the finalisation of a "Knowledge Management" programme for the Legal Function, whose first achievements included the mapping of legal knowledge. This is a collection of best practices, a methodology to ensure the transmission of "at risk" expertise and the creation of a digital directory of lawyers based on their legal knowledge and expertise.
- Several points will be included on the 2020 roadmap, notably:
  - a new Multi-Local Panel of legal firms to replace the Specialist Panel;
  - finalisation of the global operational risk management system and the permanent control mechanism in accordance with the "Target operating model" defined by the Risk Function;
  - educational support for the first lines of defence and reinforcement and expansion of the "supervision" of legal risks;
  - functional enhancement of the Legal Function's tool for reporting legal risks;
  - implementation of an application-based "Matter Management" solution for the entire Legal Function;

- continuation of training for new lawyers in subjects relating to digitalisation as part of the Legal Function's digital expertise plan;
- acceleration of the implementation of the "Quality & Learn" programme.

RISK AND PERMANENT CONTROL

The new operational risk management model from the point of view of the second line risk team has now been deployed in all of the Group's entities. This model is based on a hybrid and complementary structure with, on the one hand, decentralised teams within the businesses, under the responsibility of the Risk Officers of these businesses, working closely with the processes, operational staff and systems and on the other, a central structure Risk ORC Group with a steering and coordination role providing support to the local teams on subjects requiring specific expertise (for example: fraud prevention or the management of risks related to the supply of products and services by third parties).

All of the components of the procedural system for operational risk have been significantly overhauled since 2018:

- Risk and Control Self Assessment (RCSA);
- Controls;
- Collection of Historical Incidents;
- Analysis and quantification of operational risk scenarios ("potential incidents");
- Action plans.

Work on the taxonomy of risks as well as the mapping of processes and organisational structures has also been completed to further standardise guidelines supporting the assessment and management of operational risk.

In addition to these methodological changes, the deployment of a new integrated operational risk management tool ("360 Risk Op") began in the fourth quarter of 2019. This tool comprises different interconnected modules, the first of which is dedicated to the collection of Historical Incidents, and entered operation on 4 November 2019. The other modules (RCSA, Potential Incidents, Controls and Action Plans) will be delivered gradually between 2020 and 2021.

In terms of technological risks, the Risk ORC ICT teams have continued to work to improve the risk management system, resulting in:

- evaluation of the capacity to protect against and detect risks by performing in-depth technical tests for the Group's entities and independent tests in the operating environment (under the form of Red Team missions);
- the joint definition of reference standards in terms of protection, detection and crisis management;
- reinforced surveillance of the position adopted to address the Group's residual IT risks and regulatory reporting;
- the joint definition of IT and Security risks for the Group's shared services (for example CyberSOC, Cloud services, etc.);
- the performance of crisis simulations based on complex operational resilience scenarios.

The global network of Data Protection Officers and the framework for data protection have also been reinforced this year. The main initiatives in terms of data protection in 2019 include the following activities, which are aimed at streamlining data protection requirements within the Group's global control system:

- the addition of requirements relating to the General Data Protection Regulation in the cybersecurity programme;
- increased work in providing advice and performance management by the Group Data Protection Office.

2019 was also marked by sustained regulatory activity, notably with:

- the introduction of a new prudential policy on securities issues;
- the passing of the new European CRR2 Regulation whose prudential requirements will enter into force in 2021;
- developments concerning the framework around non-performing loans and more generally on aspects related to the quality of bank assets.

Work related to this activity involved teams from Group Finance, Risk and ALM Treasury.

In 2019, the Risk Function, as the second line of defence against environmental, social and governance (ESG) risks, also continued its work to adapt the framework, processes and governance of credit committees with the aim of including an ESG risk analysis of the Group's non-financial corporate clients. The teams have also continued with the effective deployment of the second line of defence in the Group's main corporate businesses.

The Risk Function continued its industrialisation, notably via the reinforcement of its shared operational platforms in Lisbon and Mumbai. A number of initiatives have also continued and new ones have been launched to simplify, automate and pool certain internal processes and contribute to the end-to-end review of customer processes, whilst ensuring that the control system is at the highest level. The Risk Function also continued to insert new technologies into the key risk management systems, either via partnerships with "fintechs" on credit granting and monitoring processes or via the creation of a dedicated artificial intelligence team for the function.

In 2020, the Risk Function's main projects will be:

- the delivery and roll-out of the new operational risk information system in the businesses and functions, and the support of operational entities as part of this roll-out;
- work on finalising the implementation of the "Third Party Risk Management" system;
- strengthening the system around business continuity and crisis management, especially for aspects relating to technological risks;
- enhancing the data protection system for the Group;
- integrating of ESG risks, particularly climate risks, into the Group's global risk management system;
- supporting the transformation of the Group's business by continuing with its own industrialisation improving its integration into the businesses processes, as well as integrating new technologies to further advance and improve the efficiency of the Group's risk management system;
- the implementation of new sites and/or projects enabling the Group to fully meet the expectations of its regulators and supervisory authorities.

Risk management related to climate change

Since the Paris Agreement in November 2015, the BNP Paribas Group has taken a number of steps to integrate climate change risk management and to support energy transition in line with the Paris Agreement.

The Group has made coal-related commitments such that it no longer finances the extraction of coal, whether via mining projects or via specialised coal mining companies without a diversification strategy, as well as coal-based power plant projects. In 2019, the Group decided that it would completely cease its financing of the coal industry by 2030 in the countries within the European Union, and by 2040 for the rest of the world.

The Group has also adopted a new sectoral policy on unconventional hydrocarbons. This concerns players whose main activity is the exploration, production, distribution, marketing or trading of shale gas and/or oil or bituminous sands. Projects primarily dedicated to the transportation and export of these hydrocarbons are no longer financed. In addition, the Group excludes all financing for exploration or gas or oil production projects in the Arctic.

The criteria relating to greenhouse gas emissions have been strengthened in sectoral policies and in specific credit policies.

Each year, the Group also calculates its financed energy mix. Indicators to this effect have been included in the Risk Appetite Statement of BNP Paribas.

Further information on climate change risk management can be found in Commitment 3 described in chapter 7 of the Universal registration document.

PERIODIC CONTROL

In 2019, the General Inspection repeated its annual risk assessment exercise which was conducted for the first time in 2017. In 2019, all of the audit units (AUs) were reviewed based on previous years and by reinforcing cross-functional consistency checks by businesses/teams. In the end, the overall residual risk profile appeared broadly stable in 2019 compared to 2018.

A total of 930 missions were completed in 2019, or 97% of the goal for the year. According to the General Inspection's principles, the missions completed in 2019 focused on those AUs with the highest level of residual risks or with a specific regulatory audit cycle. They also focused on new AUs, in particular those which were created to cover the near-shoring platforms and finally those whose past audit coverage was judged to be inadequate and should be supplemented.

General Inspection improved its monitoring system by updating a multi-year audit plan. The aim of this plan was to organise coverage of the entire auditable scope with reasonable frequency, *i.e.* according to the criticality of the AUs. The duration of the audit cycle cannot exceed 5 years in any case. By convention, 2018 was considered as the first year of the five-year cycle. The goal is therefore to cover the entire scope by 2022 at the latest.

The auditable scope is represented by mapping 2,918 audit units. The updating of the risk assessment for each of them consists of an assessment of inherent risks, the quality of the GRC (Governance, Risk Management, Internal Control), and, lastly, the residual risk. Since the last mission sufficiently covered this, this serves as a starting point for the next coverage cycle.

The frequency of audit for each AU is based on the residual risk score. The frequency is shorter when the residual risk is assessed as high. If the AU is accompanied by a specific regulatory audit cycle, the applicable cycle is the shortest period between the regulatory cycle and that resulting from the Risk Assessment.

All the AUs were placed in order of priority by combining these different elements.

This exercise enabled a timetable up to 2022 to be drawn up for all the AUs. It was updated compared to the previous year to take into account changes in the mapping, risk assessment and effective coverage by the missions.

In line with the transformation and digitalisation of the Group, the General Inspection continues its efforts to develop the use of methods by the data analysis team as part of the execution of the audit.

The initiative is structured around a central team, with members in each of the audit hubs, and it covers different objectives.

One of these objectives is to improve operational efficiency by creating a library of cases to automate certain recurring analyses. At the end of 2019, 20 cases had been developed.

In 2019, the data analysis had deepened the coverage of the risks where certain audit missions proposing analyses are based on exhaustive data challenges and benefit from increased processing capacities.

The capacity of General Inspection to fulfil all of these missions is based on the one hand on the continued increase in its number of employees, which reached 1,446 FTE at 31 December 2019 (+3.7% in one year; +41% since the end of 2014).

General Inspection continues its policy of investing significantly in training to allow new employees to gain the skills base required to perform their role. All audit employees receive high level regulatory training and technical training depending on their role and investigation scope. Professional certifications are encouraged to demonstrate that skills have been validated and mastered. In the same vein, General Inspection deployed a tool intended for all inspectors and auditors to check their knowledge of its methodological principles.

General Inspection has launched an in-depth review of its audit guides. It has rewritten some of them and has reviewed the library tools so that it is better linked to regulatory changes and to ensure greater consistency between the different elements of audits carried out worldwide. The elements of the audits that have been rewritten are based as far as possible on the cases arising from the data analysis.

2020 will continue along the same lines as the previous year, with further work being undertaken on the nature and content of the performance of the missions. General Inspection will also improve its expertise in the auditing of models through the ramp-up of a dedicated team.

INTERNAL CONTROL EMPLOYEES

At year-end 2019, the various internal control functions were supported by the following headcount numbers (FTE = Full Time Equivalents, year-end):

	2015	2016	2017	2018[1]	2019	Change (2018/2019)
Compliance	2,715	3,387	3,770	4,186	4,378	+5%
LEGAL	1,650	1,754	1,752	1,841	1,810	-2%
Risk	2,635	5,163	5,232	5,321	5,475	+3%
Periodic control	1,104	1,236	1,296	1,394	1,446	+4%
TOTAL	**8,104**	**11,540**	**12,050**	**12,742**	**13,109**	**+3%**

(1) Internal control employees in 2018 did not include FHB (First Hawaiian Bank).

INTERNAL CONTROL PROCEDURES RELATING TO PREPARING AND PROCESSING ACCOUNTING AND FINANCIAL INFORMATION

ROLES AND RESPONSIBILITIES FOR PREPARING AND PROCESSING ACCOUNTING AND FINANCIAL INFORMATION

Under the authority of the Chief Operating Officer, the Finance Function is responsible for preparing and processing accounting and financial information. It also has an independent control mission which aims to ensure control of the risk related to this information. The missions, implemented with the contribution of all those working within the function, are defined in a specific charter. These consist of:

- defining accounting policies and standards as well as management information principles and standards;
- preparing accounting information and ensuring their regulatory reporting;
- producing information used in solvency and liquidity ratios, calculating the ratios themselves and preparing the regulatory reporting of them;
- preparing management information (realised and projected in accordance with various scenarios) and providing the necessary support for economic management;
- managing the risk associated with accounting and financial information (results, balance sheet, solvency and liquidity) by defining and implementing a permanent operational control system;
- handling the Group's financial communication, ensuring that it is of good quality and well-perceived by the markets;
- managing the Group's financial structure;
- overseeing the architecture, design and deployment of the financial information systems (results, balance sheet, solvency, liquidity);
- defining and leading the organisation of the Finance Function;
- determining the organisation and operational processing of activities related to the Finance Function;
- exercising a duty to alert Executive Management.

All of its missions, whether carried out directly or with other functions and the ALMT, require those involved to be fully competent in their particular areas, or, in other words, to understand and check the information they produce and to comply with the required standards and time limits. Particular attention is paid to compliance, quality and integrity of the information used and data protection. Under the authority of the Group CFO, the governance of the system as a whole relies on three basic principles: decentralising the Finance Function, separating the accounting and management information channels, and giving either operational areas (division/business line) or geographical areas (legal entities) responsibility for finance. In practice, the responsibility of the Finance Function is carried out as follows:

- the Finance Function in each entity produces accounting and financial information and carries out the controls to ensure its reliability; the entity's Finance Department sends the information produced to the division/business line to which it is operationally attached;
- the divisions/business lines carry out a business analysis and check the data produced by the entities and improve its quality, for instance by reconciling, at their level, the accounting and management data;
- centrally, Finance prepares the reporting instructions distributed to all divisions/business lines and consolidated entities in order to ensure that the data is homogeneous and complies with the Group's rules. It gathers all the accounting and management information produced by the entities and approved by the divisions/business lines and assembles and consolidates these data for use by Executive Management or for communication to third parties.

PRODUCING ACCOUNTING AND FINANCIAL INFORMATION

Accounting policies and rules

The local financial statements for each entity are prepared following the accounting standards prevailing in the country where the entity carries on business, while the Group consolidated financial statements are prepared under IFRS (International Financial Reporting Standards) as adopted by the European Union.

Within Finance, the "Group Accounting Policies" Department defines the IFRS-based accounting principles to be applied to the Group as a whole. It monitors changes to regulations and interprets them as necessary by issuing new principles. A manual of the Group's IFRS accounting principles is available for the divisions/business lines and entities on the internal network communication tools ("intranet") of BNP Paribas. It is regularly updated to reflect regulatory changes.

In addition, the "Group Accounting Policies" Department also responds to requests from the divisions/business lines or accounting entities for specific accounting studies, particularly when a new financial product or transaction is designed or recorded in the accounts.

Lastly, another department within Finance is dedicated to the preparation of management principles and standards that take into account the needs identified by the management channel. These principles and standards can also be accessed using internal network tools (intranet).

The regulations relating to solvency fall under the Risk Function (with the contribution of the Finance Function), while regulations on liquidity fall under the ALMT (with the contribution of the Finance and Risk Functions) and regulations relating to the leverage ratio fall under the Finance Function (with the contribution of the Risk function).

Data processing system

The data processing system is structured around two distinct channels:

- **the accounting channel:** this is more specifically responsible for preparing the financial and analytical accounting of the entities and for preparing the Group's consolidated financial statements in accordance with accounting policies and standards. It also produces related information on solvency and liquidity, ensuring that it is consistent with the accounting at each level. The channel certifies the reliability of the information produced by applying internal certification procedures (described below).

  Moreover, as part of the Single Channel programme, systems for generating accounting refunds were enhanced with specific credit risk and liquidity data in addition to the accounting and analytical data already present. This development, coupled with the implementation of a shared reporting platform, currently being rolled out, will ultimately facilitate the achievement of financial and regulatory reporting requirements.
- **the management channel:** this channel prepares the management information (especially that from the divisions/business lines compiled from the data per entity) that is relevant to the economic management of activities, complying with the established internal principles and standards. It ensures the consistency of the management data with the accounting data, at every level. This channel is responsible for the preparation of solvency and liquidity ratios and for their analysis.

Finance designs, distributes and administers the reporting tools for the two channels. These tools are designed to suit the channels' individual objectives and necessary complementarity, and provide information for the entire Group. In particular, Finance promotes the use of standard accounting systems in Group entities. The systems are designed at Group level and progressively rolled out. This approach promotes the sharing of information and facilitates the implementation of cross-functional projects in the context of the development of pooled account processing and synthesis within the Group.

For the preparation of liquidity-related data, the Group has adopted the principle of integrating internal management data and those required for regulatory reporting, which is based on the following system:

- governance involving Finance, ALMT and the Risk Function, at Group level and at the level of the divisions/business lines and entities;
- policies and methodologies applicable as required by regulations;
- a dedicated Group tool ensuring data collection and the production of internal and regulatory reports drawing on tools and processes implemented at the level of the divisions/business lines and entities.

This series of measures ensures the production of regulatory reports on liquidity as well as internal monitoring indicators and contributes to reporting relating to the bank resolution.

PERMANENT CONTROL OF ACCOUNTING AND FINANCIAL INFORMATION

Internal control within the Finance Function

Finance has a "Group Control & Certification" Department to enable it to monitor the control of accounting and financial information risk in a centralised manner. Its main tasks include:

- defining the Group's policy as regards the accounting internal control system. This system requires accounting entities to follow rules in organising their accounting internal control environments and to implement key controls ensuring that the information in their consolidation packages is reliable. The Group has issued internal accounting control guidelines for use by the consolidated entities and a standard accounting control plan listing the major mandatory controls aimed at covering the accounting risk;
- ensuring that the internal control environment for accounting and financial information functions properly within the Group, in particular via the procedure for internal certification of accounts described below; to report quarterly to Executive Management and the Board's Financial Statements Committee on the quality of the Group's financial statements;
- together with the Risk Function, overseeing the proper functioning of the system for collecting and processing consolidated credit risk reporting, including by means of a specific certification system and quality indicators;
- monitoring the implementation by entities of recommendations from the Statutory Auditors and from General Inspection relating to the accounting risk, with the support of the divisions/business lines. This monitoring is facilitated by use of a dedicated tool that enables each entity to monitor the recommendations made to it and to regularly report on the progress made on the various action plans. Centralised

monitoring of these recommendations enables Group Finance to identify improvements to the accounting internal control system made within the consolidated entities, identify any cross-functional problems and, if necessary, revise the Group-level procedures and instructions.

For the Accounting channel, independent central control teams pass these tasks to the Finance Departments in the divisions/business lines, which supervise the entities closely and, if necessary, implement accounting controls geared to their specific situation.

Lastly, within the entities' Finance Departments, the Group's accounting internal control principles have led to dedicated and independent accounting control teams or representatives, depending on the size of the entities, being set up. As such, the Group's established approach, in which the reporting production tasks are consolidated on regional platforms (improving the harmonisation of the reporting and control processes and increasing their efficiency for the entities concerned), also ensures that the accounting control teams are the appropriate size and have the necessary expertise. The main missions of these local teams are as follows:

- providing a link between Finance and the back offices that sends data to the accounting system, for instance, by verifying that the back offices have the information they need for their accountancy work (*e.g.* training in the accounting tools provided; knowledge about the accounting structure, etc.);
- implementing the second-level accounting controls within all entities within their scope. In a decentralised accounting framework, these controls complete the first level controls carried out by back offices, and particularly rely on accounting control tools that, for example, make it possible, in the case of each account, to identify the department responsible for its justification and control, to reconcile the balances recorded in the accounting system with the balances in the operational systems for each business, and to identify, justify and monitor the clearing of suspense accounts;
- coordinating the "elementary certification" process (described below) requiring an entity's different departments to report on the controls that they have carried out;
- to ensure that the accounting internal control system enables the entity's Finance Department to have sufficient oversight of the process of preparation of account summaries, and in particular over all the elements necessary for the Group's certification process (described below). To assist in achieving this objective, the tasks involved in accounts closure are formally defined. The use of tools to map the processes and associated risks and to document the checks as well as the coordination with other control channels contributes to improving the quality.

Internal Certification Process

At Group level

Finance uses FACT (Finance Accounting Control Tool) for the internal certification of the quarterly data produced by each entity for the consolidation package; for the validation performed within the Finance Departments of divisions/business lines; and for the consolidation process for which the Group Reporting Department within Group Finance is responsible.

The Chief Financial Officer of each entity concerned certifies to Finance that:

- the transmitted data have been prepared in accordance with the Group's norms and standards;
- the accounting internal control system guarantees its quality and reliability.

The main certificate completed by fully consolidated entities reproduces the results of all of the major controls defined in the Group's accounting control plan, and leads to the determination of a rating for each entity. Entities consolidated by the equity method complete an appropriate certificate. Finally, non-consolidated entities are certified annually through a simplified procedure.

This internal certification process forms part of the Group's monitoring system for Internal control and enables Finance, which has the overall responsibility for the preparation and quality of the Group's consolidated financial statements, to be informed of any problems in the financial statements and to monitor the entities' implementation of appropriate corrective measures. A report on this process is presented to Executive Management and to the Financial Statements Committee of the Board of directors at the close of the Group's quarterly consolidated accounts.

This certification system is also in place, in conjunction with the Risk Function, for the information included regulatory reporting on credit risk and the solvency ratio. Those contributing to the reports attest that they have complied with the standards and procedures and that the data used is of appropriate quality. They further describe the results of the controls carried out at the various stages of producing the reports.

On the same principles, a certification system is in place for the reporting of liquidity-related data. The various contributors report on the compliance of the data transmitted with the standards, and the results of key controls performed to ensure the quality of reporting.

At entity level

In order to ensure the oversight of all the processes of preparation of accounting information at the level of each entity's Finance Department, Control & Certification recommends implementing an "elementary certification" (or "sub-certification") process for accounting data whenever the processing of transactions and the preparation of accounting and financial data are organised in a decentralised way that makes such a process necessary.

This is a process by which the providers of the information used to prepare accounting and financial data (*e.g.* middle office, back office, Human Resources, Risk, Suppliers' Accounts, etc.) formally certify that the fundamental controls intended to ensure the reliability of the accounting and financial data under their responsibility function properly. The elementary certificates are sent to the local Finance Department, which analyses them in combination with the accounting controls that it exercises directly, prepares a summary report intended to be used to prepare the main certificate, and liaises with the various players in order to monitor points requiring attention.

The FACT application also makes it possible to automate this sub-certification process by providing entities with a dedicated environment in which they can directly manage the processes set up at their level.

Control of the value of financial instruments and the use of valuation in determining the results of market activities and accounting reports

Finance is responsible for producing and ensuring the quality of the Group's accounting and management information. It delegates the production and control of market values or models for financial instruments to specialists in this area, who thus form a single, integrated channel for valuing such instruments. The processes covered include:

- verifying the appropriateness of the valuation system as part of the approval process for new transactions or activities;
- verifying the proper recording of transactions in the systems and ensuring it is appropriate with the valuation methodologies;
- verifying the development and approval mechanism independent of the valuation methods;
- determining the market parameters and the procedure for an independent verification of these parameters;
- determining valuation adjustments for market, liquidity and counterparty risks;
- classifying instruments within the fair value hierarchy, determining day one profit adjustments, estimating the sensitivity of level 3 valuations to valuation assumptions.

Through appropriate processes and tools, the channel's objectives are to ensure both the correctness and the reliability of the process for valuing financial instruments, and the quality and comprehensiveness of the control system. It can thus provide the appropriate data to the various decision-making bodies, data that also informs the operational processes for compiling the accounting and management results, and ensures the transparency of annexes dedicated to fair value.

The control exercised by the valuation channel which involves all players is supervised by the Finance Function and has its own governance framework. This control system is based on a set of organisational principles defined in the Group's Internal Control Charter for each organisational level, *i.e.* Group, CIB and the main entities that account for market transactions.

The Finance Function relies on dedicated CIB Methodology & Financial Control (CIB MFC) teams, which oversee the entire system, to ensure that it is functioning correctly. The Finance Function decides on the information that must be reported by the various players: this comprises both quantitative and qualitative data indicating trends in different businesses as well as the results and quality of upstream controls carried out.

Several committees that meet on a quarterly or monthly basis are set up to bring all of the players together to review and examine, for each process and business line, the methods used and/or the results of the controls conducted. These committees' operating methods are governed by procedures approved by the Finance Function, ensuring that the Finance Function takes part in the main choices and arbitrations. Lastly, the CIB MFC reports at each accounting quarter-end to the Product Financial Control Committee (PFC), an arbitration and decision-making committee chaired by the Group Chief Financial Officer, on its work, and informs the committee of the points of arbitration or attention concerning the effectiveness of the controls and the reliability of the result measurement and determination process. This quarterly Committee meeting brings together the business lines, Group Finance and the divisions concerned, the ALMT and the Risk Function. Intermediary PFC committees complete this system and aim to define project priorities, monitor their implementation and thoroughly examine certain technical elements.

Development of the system

The control system is continuously adapted to the Group's requirements. The procedures described form part of an evolving system that aims to guarantee an adequate level of control throughout the Group.

In particular, the quality of the accounting certification process is regularly reviewed with the divisions/business lines, for instance with the preparation of quantitative indicators for some controls, targeted cross-functional reviews of a major control and *ad hoc* reviews with the divisions/business lines on specific points for improvement in various areas. These reviews are supplemented by presentations to the various committees in the Finance channel, on-site visits and training sessions. Group procedures clarifying some major controls, and detailed instructions aimed at ensuring consistent responses and adequately-documented processes are also distributed. These Group procedures and instructions are extended where necessary at divisions/business lines level to cover issues specific to them.

Similarly, the certification system of the data contributing to the calculation of the capital adequacy ratio is subject to adjustment in order to take into account developments in the processes and the organisation, and to capitalise on indicators and controls in place in the various sectors in connection with the improvement programme on the reporting and the quality of the data.

In addition, in respect of liquidity reporting, changes in processes and tools are carried out regularly in order to adapt to the new demands of regulatory reporting, and specific actions are taken with the various contributors in order to enhance the quality and controls for the channel.

Lastly, in late 2019, the Group completed a programme called Risk Data Aggregation and Reporting (RaDAR) in response to the "Principles for effective risk data aggregation and risk reporting" established by the Basel Committee. The aim of this programme was to improve the quality and integrity of the data needed to produce reports covering the different types of risks to which BNP Paribas is exposed (credit, market, liquidity, operational), and to strengthen the consistency of reporting for all levels of the organisation during normal times as well as in times of stress or crisis.

The Group believes itself to be compliant with the principles established by the Basel Committee for the purposes of risk data aggregation and risk reporting ("Principles for effective risk data aggregation and risk reporting") in line with the criteria defined when the RaDAR programme was launched.

To ensure that the Group complies with BCBS 239 principles in day-to-day operations management, BNP Paribas has appointed a Group Chief Data Officer (CDO) as well as a CDO Risk/Finance. To ensure compliance, they use the Chief Data Officers' process within the businesses and functions.

The main duties of the "Group Data Office" are:

- in close cooperation with the Group's businesses and functions, to define a "Group data vision" in view of the business's strategy and objectives;
- to implement this vision with the support of the Group IT Manager and make the data easy to handle in order to support the analytical and digital transformation;
- to use the Group business and function community's management and coordination process to strengthen the data culture within the Group;
- to improve data management measures, including compliance with BCBS 239 and the data protection regulation.

PERIODIC CONTROL

General Inspection has a dedicated Finance channel (the Finance Audit Line) with a team of inspectors who specialise in accounting and financial auditing, thus reflecting the Department's strategy of having an auditing capability in accountancy, as regards both the technical complexity of its work and its coverage of accounting and financial risk.

Its action plan is based on an annual risk assessment exercise, the practical details of which have been established by General Inspection based on the risk evaluation chart defined by the Risk Function.

The core aims of the team are as follows:

- establishing a hub of accounting and financial expertise in order to reinforce the capability of General Inspection when carrying out inspections in such areas;
- disseminating internal audit best practices and standardising the quality of related audit work;
- identifying and inspecting areas of accounting and financial risk at Group level.

RELATIONS WITH THE STATUTORY AUDITORS

Each year, as part of their statutory assignment, the Statutory Auditors issue a report in which they give their opinion concerning the consistency and fairness of the consolidated financial statements of the BNP Paribas Group as well as the annual financial statements of the Group's companies. The Statutory Auditors also carry out limited reviews on the closing of the half-yearly accounts, and specific tasks in relation to the quarterly accounts.

Thus, as part of their statutory mission:

- they examine any significant changes in accounting standards and present their opinions to the Financial Statements Committee concerning the accounting choices with a material impact;
- they present their conclusions to the Finance Functions in the entities/business lines/divisions and at a Group level, and in particular any observations and recommendations to improve certain aspects of the internal control system that contributes to the preparation of the accounting and financial information that they reviewed during their audit.

FINANCIAL COMMUNICATION (PRESS RELEASES, SPECIAL PRESENTATIONS, ETC.)

Financial communications for publication are written by the Investor Relations and Financial Information Department within Finance. It is directed at retail and institutional shareholders, financial analysts and rating agencies, and presents the Group's different activities, explains its results and describes its development strategy, while maintaining the financial information homogenous with that used at an internal level.

The team, which reports to Executive Management and the Chief Financial Officer, devises the format in which financial information is published by the BNP Paribas Group. It works with the divisions and functions to prepare the presentation of financial results, strategic projects and specific topics. It distributes them to the financial community.

The Statutory Auditors are associated with the validation and review phase of communications relating to the closing of quarterly, half-yearly or annual financial statements, before their presentation to the Financial Statements Committee and to the Board of directors, who approve them.

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3.1 BNP Paribas consolidated results

In millions of euros	2019	2018	2019/2018
Revenues	**44,597**	**42,516**	**+4.9%**
Operating Expenses and Dep.	(31,337)	(30,583)	+2.5%
Gross Operating Income	**13,260**	**11,933**	**+11.1%**
Cost of Risk	(3,203)	(2,764)	+15.9%
Operating income	**10,057**	**9,169**	**+9.7%**
Share of Earnings of Equity-Method Entities	586	628	-6.7%
Other Non Operating Items	751	411	+82.7%
Non Operating Items	**1,337**	**1,039**	**+28.7%**
Pre-Tax Items	**11,394**	**10,208**	**+11.6%**
Corporate Income Tax	(2,811)	(2,203)	+27.6%
Net Income Attributable to Minority Interests	(410)	(479)	-14.4%
Net Income Attributable to Equity Holders	**8,173**	**7,526**	**+8.6%**
Cost/Income ratio	**70.3%**	**71.9%**	**-1.7pt**

STRONG GROWTH IN INCOME THANKS TO BUSINESS DRIVE AND TRANSFORMATION

BNP Paribas delivered a very good overall performance this year, confirming the strength of its diversified and integrated model and its ability to create value in changing economic, technological, environmental, regulatory and societal conditions.

At EUR 44,597 million, revenues were up 4.9% compared to 2018[1].

In the operating divisions, revenues rose by 5.9%, with an increase in all the divisions: +0.8% in Domestic Markets[2] where the effect of the persistently low interest rate environment impacting negatively the networks in the eurozone was more than offset by the business growth, in particular in the specialised businesses; +6.9%[3] in International Financial Services in connection with the business drive at Personal Finance and the very good performance of insurance and Europe-Mediterranean; and +11.6% in CIB which posted strong revenue growth with very good performance by Global Markets and Corporate Banking.

The Group's operating expenses, at EUR 31,337 million, were up 2.5% compared to 2018. They included the following exceptional items: the transformation costs of the 2020 plan (EUR 744 million), restructuring costs[4] (EUR 311 million) and adaptation measures[5] (EUR 162 million for early departure plans) totalling EUR 1,217 million (EUR 1,235 million in 2018).

The operating expenses of the operating divisions rose by 3.5% compared to 2018: they were up slightly by 0.3% for Domestic Markets[6] with a decrease in the networks (-0.5%) and a 4.5% increase in the specialised businesses related to business development, rose by 4.5% for International Financial Services[6] to support growth, and rose by 6.1% at CIB in line with business growth.

Good cost control generated a positive 2.4 point jaws effect. The jaws effect was accompanied by an improvement of the cost income ratio in each of the operating divisions thanks to the implementation, of cost saving measures for a cumulative total of EUR 1.8 billion in 2019 in line with the 2020 plan launched in 2017. The related transformation costs are in line with the objectives announced. There will be no transformation costs in 2020.

(1) +4.6% at constant scope and exchange rates.

(2) Including 100% of Private Banking in the domestic networks (excluding PEL/CEL effects).

(3) +4.7% at constant scope and exchange rates.

(4) Restructuring costs related in particular to the integration of Raiffeisen Bank Polska and the discontinuation or restructuring of certain businesses (in particular BNP Paribas Switzerland).

(5) Adaptation measures related in particular to BNL bc, Asset Management and BancWest.

(6) +1.5% at constant scope and exchange rates.

The Group's gross operating income thus came in at EUR 13,260 million, up 11.1%. It rose by 11.2% for the operating divisions.

The cost of risk, at EUR 3,203 million, rose by EUR 439 million compared to 2018. At 39 basis points of outstanding customer loans, it remained at a low level due in particular to the good control of risk at origination, the low interest rate environment and the continued improvement of the credit portfolio in Italy.

The Group's operating income, at EUR 10,057 million, was thus up 9.7%. It was up 9.4% for the operating divisions.

Non operating items totalled EUR 1,337 million, up from 2018 (EUR 1,039 million). They reflected the exceptional impact of the capital gain from the sale of 16.8% of SBI Life in India, followed by the deconsolidation of the residual stake[(1)] (+EUR 1,450 million), the +101 million euro capital gain from the sale of a building, and the impairment of goodwill (-EUR 818 million). They included in 2018 the +101 million euro capital gain from the sale of a building and the EUR 286 million capital gain from the sale of 30.3% from First Hawaiian Bank.

Pre-tax income, at EUR 11,394 million (EUR 10,208 million in 2018), was up 11.6%.

The average corporate tax rate was 24.2%, due in particular to the low taxation of the capital gains with respect to SBI Life.

The Group's net income attributable to equity holders thus came at EUR 8,173 million, up 8.6% compared to 2018 and +4.7% excluding exceptional items.

The return on tangible equity not revaluated clocked in at 9.8% reflecting the Group's good overall performance.

As at 31 December 2019, the common equity Tier 1 ratio came in at 12.1%, up 40 basis points compared to 1 January 2019[(2)]. The leverage ratio[(3)] came in at 4.6%. The Group's immediately available liquidity reserve amounted to EUR 309 billion, equivalent to over one year of room to manoeuvre in terms of wholesale resources.

The net book value per share reached 79.0 euros, an average annual growth rate of 5.1% since 31 December 2008. Tangible net book value per share[(4)] amounted to 69.7 euros, a growth rate of 7.3% since 31 December 2008 illustrating the continuous value creation throughout the cycle.

The Board of directors will propose to the shareholders at the Annual General Meeting to pay a dividend of EUR 3.10 per share (+2.6% compared to 2018) paid in cash[(5)], equivalent to a 50% pay-out ratio in line with the plan.

The Group is continuing its transformation and is actively delivering its 2020 plan while strengthening its internal control and compliance system.

At the end of 2019, BNP Paribas reaffirmed its ambition to be a global leader in sustainable finance. The Group is already recognized in this area, as illustrated for example, by being the number 3 participant worldwide in the green bond market at the end of 2019, with EUR 9.8 billion as joint bookrunner for its clients, and having signed EUR 3.7 billion of Sustainability Linked Loans at the end of 2019, a financing tool indexed on environmental, social and governance (ESG) criteria. This policy of engagement to have a positive impact on society is recognised through the bank's strong rankings (World's Best Bank for corporate responsibility in 2019 by Euromoney) and its presence in the major specialised indices (Dow Jones Sustainability Indices, World and Europe).

Capital allocation

Revenue from the capital allocated to each division is included in the division's profit and loss account. The capital allocated to each division corresponds to the amount required to comply with CRD IV regulation, also known as Basel 3, and is based on 11% of risk-weighted assets.

Risk-weighted assets are calculated as the sum of:

- the risk-weighted assets for credit and counterparty risk, calculated using the standard approach or the Internal Ratings Based Approach (IRBA) depending on the particular entity or business activity;
- the regulatory capital requirement for market risks, for adjustment of credit valuation and for operational risk, multiplied by 12.5.

Moreover, elements that are deducted from Tier 1 capital are allocated to each division.

Last, the capital allocated to the insurance business is based on the minimum solvency capital requirement as defined by Solvency II.

(1) 5.2% residual stake in SBI Life.

(2) Reminder: -10 bps compared to 31 December 2018 due to the impact of the new IFRS 16 accounting standard.

(3) Calculated according to the delegated act of the European Commission dated 10 October 2014.

(4) Revaluated.

(5) Subject to the approval of the Annual General Meeting on 19 May 2020, shares will go ex-dividend on 25 May 2020, payment on 27 May 2020.

3.2 Core Business results

RETAIL BANKING & SERVICES

In millions of euros	2019	2018	2019/2018
Revenues	**32,433**	**31,188**	**+4.0%**
Operating Expenses and Dep.	(20,946)	(20,455)	+2.4%
Gross Operating Income	**11,488**	**10,732**	**+7.0%**
Cost of Risk	(2,927)	(2,611)	+12.1%
Operating Income	**8,561**	**8,122**	**+5.4%**
Share of Earnings of Equity-Method Entities	489	486	+0.7%
Other Non Operating Items	(26)	58	n.s.
Pre-Tax Income	**9,024**	**8,665**	**+4.1%**
Cost/Income	64.6%	65.6%,	-1.0pt
Allocated Equity *(€bn)*	54.9	52.5	+4.7%

Including 100% of Private Banking in France (excluding PEL/CEL effects), in Italy, Belgium, Luxembourg, at BancWest and TEB for the Revenues to Pre-tax income line items.

DOMESTIC MARKETS

In millions of euros	2019	2018	2019/2018
Revenues	**15,814**	**15,683**	**+0.8%**
Operating Expenses and Dep.	(10,741)	(10,707)	+0.3%
Gross Operating Income	**5,073**	**4,977**	**+1.9%**
Cost of Risk	(1,021)	(1,046)	-2.4%
Operating Income	**4,052**	**3,930**	**+3.1%**
Share of Earnings of Equity-Method Entities	1	(3)	n.s.
Other Non Operating Items	1	0	n.s.
Pre-Tax Income	**4,054**	**3,927**	**+3.2%**
Income Attributable to Wealth and Asset Management	(256)	(264)	-3.0%
Pre-Tax Income of Domestic Markets	**3,798**	**3,663**	**+3.7%**
Cost/Income	67.9%	68.3%	-0.4pt
Allocated Equity *(€bn)*	25.7	25.2	+2.4%

Including 100% of Private Banking in France (excluding PEL/CEL effects), Italy, Belgium and Luxembourg for the Revenues to Pre-tax income line items.

For the whole of 2019, Domestic Markets' business activity was up. Outstanding loans rose by 4.1% with good growth in loans in Retail Banking particularly in France and Belgium and in the specialised businesses (Arval, Leasing Solutions). Deposits rose by 7.2% compared to 2018. Private Banking reported a good level of net asset inflows of +EUR 5.6 billion.

The division confirmed the success of its digital offerings and its leading position among neobanks in Europe. It has 9.7 million digital customers and is recognised, for example in France, for its leadership in terms of functionalities (D-Rating agency ranked BNP Paribas number 1 among banking networks in France). The mobile usages of individual customers accelerated, with more than 97 million connections to apps, an increase of 23.4% compared to 2018 and with 56.5% of active clients being active digital customers. As at 31 December 2019, the digital bank Hello bank! was gaining momentum in France, Belgium and Italy on the youth client segment, reaching 506,000 customers in Belgium, 520,000 customers in France and over 1.5 million customers in Germany. For its part, the Nickel neobank exceeded 1.5 million accounts opened as at 31 December 2019 (+33% compared to 31 December 2018). With 5,550 points of sale in France, Nickel has become the third largest distribution network in France, confirming its leadership in the neobank market in France and ranked in the top 5 in Europe.

The Domestic Markets division confirms the strength of its growth-generating corporate and Private Banking franchises within the integrated model. A comprehensive and broad approach to customer needs with all the Group's businesses combined with strong businesses such as Trade Finance (No. 1 in France and Belgium) and Cash Management (No. 1 in France and Belgium, No. 3 in Italy) has forged a leading position in a dynamic corporate market. The division also reports strong positions in Private Banking (No. 1 in France and Belgium, No. 5 in Italy) with 8.1% growth in assets under management compared to 2018 and a positive cooperation drive with the Corporate business line (at the source of gross asset inflows close to EUR 3 billion as at 31 December 2019).

Finally, the Domestic Markets division continues its digital transformation and strengthens its model. It rolled out expanded customer knowledge tools in all countries leveraging shared digital assets. It continues to enhance operating efficiency and customer satisfaction with end-to-end digitalisation of the main customer journeys (onboarding, mortgages and investment products) in France, Italy and Belgium and to automate processes (over 700,000 transactions a month processed by robots in the networks in the fourth quarter 2019). Moreover, the operating division supports its customers beyond banking service with, for example, the development of Lyf Pay, a universal mobile payment solution that has already recorded 2.7 million downloads since it was launched in May 2017 and the roll-out of Telepass, a mobility offering for corporates and individuals in Italy (7,600 corporate customers and 66,800 individual users as at 31 December 2019).

Revenues[(1)], at EUR 15,814 million, were up 0.8% compared to 2018. Growth in loan volumes and the strong increase in the specialised businesses were almost entirely offset by the low interest rate environment in the networks.

Operating expenses[(1)] (EUR 10,741 million) rose just 0.3% compared to 2018. They were down in the networks (-0.5%[(2)] but up in the specialised businesses as regards to business growth (with a positive jaws effect). The jaws effect for the operating division was positive (+0.5 point).

Gross operating income[(1)] was up 1.9%, at EUR 5,073 million, compared to 2018.

The cost of risk was low, at EUR 1,021 million (-EUR 26 million compared to 2018). It continued its decrease at BNL bc.

Thus, after allocating one-third of Domestic Markets Private Banking's net income to the Wealth Management business (International Financial Services division), the division reported EUR 3,798 million in pre-tax income[(3)], up 3.7% compared to 2018.

FRENCH RETAIL BANKING (FRB)

In millions of euros	2019	2018	2019/2018
Revenues	**6,328**	**6,311**	**+0.3%**
Incl. Net Interest Income	*3,591*	*3,548*	*+1.2%*
Incl. Commissions	*2,737*	*2,763*	*-1.0%*
Operating Expenses and Dep.	(4,602)	(4,609)	-0.2%
Gross Operating Income	**1,726**	**1,701**	**+1.5%**
Cost of Risk	(329)	(288)	+14.1%
Operating Income	**1,397**	**1,413**	**-1.1%**
Other Non Operating Items	7	(-1)	n.s.
Pre-Tax Income	**1,404**	**1,412**	**-0.5%**
Income Attributable to Wealth and Asset Management	(143)	(148)	-3.4%
Pre-Tax Income of FRB	**1,261**	**1,263**	**-0.2%**
Cost/Income	72.7%	73.0%	-0.3pt
Allocated Equity *(€bn)*	10.1	9.6	+5.8%

Including 100% of French Private Banking for the Revenues to Pre-tax income line items (excluding PEL/CEL effects).

(1) Including 100% of Private Banking in France (excluding PEL/CEL effects), Italy, Belgium and Luxembourg.

(2) FRB, BNL bc and BRB.

(3) Excluding PEL/CEL effects of +EUR 12 million compared to +EUR 20 million in 2018.

For the whole of 2019, FRB continued its good business drive in the context of economic growth in France. Outstanding loans rose by 5.4% compared to 2018 with an increase particularly in corporate loans. Deposits were up 9.8% and Private Banking's assets under management rose by 9.3%[1] compared to 31 December 2018, with a strong rise in responsible savings (EUR 4.0 billion in outstandings, +48% compared to 31 December 2018) as a result of the launch of the financial advisory tool, myImpact[2].

The business leveraged the very good development of the corporate franchise, with in particular an increase in the number of onboardings of new clients (+27% compared to 2018) and good growth in cash management fees (+6.5% compared to 2018). Moreover, 65% of 123 companies selected as part of the French Tech initiative (French Tech 120) are FRB customers.

Revenues[3] totalled EUR 6,328 million, up 0.3% compared to 2018. Net interest income[3] was up 1.2% due to higher volumes partially offset by the effect of low interest rates. Fees[3] were down 1.0% due to the decrease in charges on fragile customers at the beginning of 2019.

Operating expenses[3], at EUR 4,602 million, were down 0.2% compared to 2018, with the impact of cost saving measures, the optimisation and streamlining of the network. The jaws effect was positive at 0.4 point.

Gross operating income[3] thus came in at EUR 1,726 million, up 1.5% compared to 2018.

At 17 basis points of outstanding customer loans, the cost of risk[3] was at a low level. It came in at EUR 329 million, up EUR 41 million compared to 2018.

Thus, after allocating one-third of French Private Banking's net income to the Wealth Management business (International Financial Services division), FRB posted EUR 1,261 million in pre-tax income[4], down just 0.2% compared to 2018.

BNL BANCA COMMERCIALE (BNL BC)

In millions of euros	2019	2018	2019/2018
Revenues	**2,778**	**2,792**	**-0.5%**
Operating Expenses and Dep.	(1,800)	(1,797)	+0.1%
Gross Operating Income	**978**	**995**	**-1.7%**
Cost of Risk	(490)	(592)	-17.3%
Operating Income	**488**	**402**	**+21.3%**
Other Non Operating Items	(5)	(3)	+45.0%
Pre-Tax Income	**483**	**399**	**+21.1%**
Income Attributable to Wealth and Asset Management	(41)	(43)	-5.3%
Pre-Tax Income of BNL bc	**443**	**356**	**+24.3%**
Cost/Income	64.8%	64.4%	+0.4pt
Allocated Equity *(€bn)*	5.3	5.5	-2.4%

Including 100% of Italian Private Banking for the Revenues to Pre-tax income line items.

For the whole of 2019, BNL bc's business operated in a lacklustre economic environment. Outstanding loans were down 1.9%[5]; the business continued to grow its market share on the corporate client segment: +0.4 point in 3 years to 5.7%[6]. Deposits were up 4.8% compared to 2018. The rise (+8.0% compared to 31 December 2018) in off balance sheet savings outstandings continued, driven by life insurance (+9.9% compared to 2018).

BNL bc is developing new digital services with the launch of Apple Pay in the Hello bank! mobile apps, thereby finalising the roll-out of the agreement signed with Apple within the scope of Domestic Markets.

Revenues[7] were down 0.5% compared to 2018, at EUR 2,778 million. Net interest income[7] was down just 0.1% due to the persistently low interest rate environment and the positioning on clients with a better risk profile. Fees[7] were down 1.1% compared to 2018 due to the unfavourable market context and non-recurring items at the beginning of the year.

Operating expenses[7], at EUR 1,800 million, were up just 0.1% compared to 2018, reflecting the effect of cost reduction and adaptation measures.

(1) Excluding the internal transfer of a subsidiary.

(2) Financial advisory solution for responsible investments in France.

(3) Including 100% of Private Banking in France (excluding PEL/CEL effects).

(4) Excluding PEL/CEL effects of +EUR 12 million compared to +EUR 20 million in 2018.

(5) -0.1% excluding the impact of the sale of non-performing loans.

(6) Source: Italian Banking Association.

(7) Including 100% of Italian Private Banking.

Gross operating income[1] thus came in at EUR 978 million, down 1.7% year-on-year.

The cost of risk[1], at EUR 490 million (-EUR 102 million compared to 2018), continued its improvement. It stood at 64 basis points of outstanding customer loans.

Thus, after allocating one-third of Italian Private Banking's net income to the Wealth Management business (International Financial Services division), BNL bc posted pre-tax income of EUR 443 million, up sharply (+24.3%) compared to 2018.

BELGIAN RETAIL BANKING (BRB)

In millions of euros	2019	2018	2019/2018
Revenues	**3,524**	**3,595**	**-2.0%**
Operating Expenses and Dep.	(2,480)	(2,521)	-1.6%
Gross Operating Income	**1,044**	**1,074**	**-2.8%**
Cost of Risk	(55)	(43)	+29.0%
Operating Income	**989**	**1,031**	**-4.1%**
Other Non Operating Items	10	18	-43.9%
Pre-Tax Income	**999**	**1,049**	**-4.8%**
Income Attributable to Wealth and Asset Management	(70)	(70)	-0.1%
Pre-Tax Income of Belgian Retail Banking	**929**	**980**	**-5.1%**
Cost/Income	70.4%	70.1%	+0.3pt
Allocated Equity *(€bn)*	5.8	5.7	+0.3%

Including 100% of Belgian Private Banking for the Revenues to Pre-tax income line items.

For the whole of 2019, BRB reported sustained business activity. Loans were up 4.4% compared to 2018 with good growth in loans to corporates and an increase in loans to individuals. Deposits rose by 5.1% and off balance sheet savings grew 8.2% compared to 2018, with in particular a strong rise in mutual fund outstandings (+12.8% compared to 2018) and an increase in life insurance outstandings.

The business continued to evolve its operational model, with in particular the conclusion of an agreement between the Belgian main banks to set up an integrated network of ATMs that provides better coverage around the country in order to be ever closer to customers.

BRB's revenues[2] were down 2.0% compared to 2018, at EUR 3,524 million. Net interest income[2] was down 3.1%, as the impact of the low interest rate environment was only partially offset by higher loan volumes. Fees[2] were up 1.4% compared to 2018.

Operating expenses[2], at EUR 2,480 million, were down (-1.6%) compared to 2018 thanks to the effect of cost reduction measures. The business closed 88 branches in 2019.

Gross operating income[2] thus came in at EUR 1,044 million, down 2.8% compared to 2018.

The cost of risk[2] totalled EUR 55 million compared to EUR 43 million in 2018. At 5 basis points of outstanding customer loans, it was very low.

After allocating one-third of Belgian Private Banking's net income to the Wealth Management business (International Financial Services division), BRB thus posted pre-tax income of EUR 929 million, down 5.1% compared to 2018.

(1) Including 100% of Italian Private Banking.

(2) Including 100% of Belgian Private Banking.

OTHER DOMESTIC MARKETS BUSINESS UNITS (ARVAL, LEASING SOLUTIONS, PERSONAL NICKEL AND LUXEMBOURG RETAIL BANKING)

In millions of euros	2019	2018	2019/2018
Revenues	**3,184**	**2,986**	**+6.6%**
Operating Expenses and Dep.	(1,859)	(1,779)	+4.5%
Gross Operating Income	**1,325**	**1,207**	**+9.8%**
Cost of Risk	(146)	(123)	+19.1%
Operating Income	**1,178**	**1,084**	**+8.7%**
Share of Earnings of Equity-Method Entities	(12)	(12)	+6.2%
Other Non Operating Items	2	(5)	n.s.
Pre-Tax Income	**1,168**	**1,067**	**+9.5%**
Income Attributable to Wealth and Asset Management	(3)	(3)	-17.6%
Pre-Tax Income of Other Domestic Markets	**1,165**	**1,064**	**+9.5%**
Cost/Income	58.4%	59.6%	-1.2pt
Allocated Equity *(€bn)*	4.5	4.4	+3.4%

Including 100% of Private Banking in Luxembourg for the Revenues to Pre-tax income line items.

For the whole of 2019, all the specialised businesses of Domestic Markets showed a very good drive. Arval's leading position was confirmed on its perimeter of 27 countries and strengthened by the doubling of the number of white label partnerships with car manufacturers. Arval's financed fleet grew strongly by 8.9%[(1)] across all segments. Leasing Solutions' financing outstandings rose by 6.9%[(1)] compared to 2018. Personal Investors reported an increase in assets under management (+21.8% compared to 31 December 2018) and Nickel continued its very strong growth with more than 366,000 accounts opened this year (1.5 million accounts opened as at 31 December 2019).

Luxembourg Retail Banking (LRB)'s outstanding loans rose by 8.6% compared to 2018, with good growth in mortgages and corporate loans. Deposits were up 11.5%.

The revenues[(2)] of the five businesses, at EUR 3,184 million, were up 6.6% compared to 2018 in aggregate.

Operating expenses[(2)] rose by 4.5% compared to 2018, at EUR 1,859 million; up with the effect of business development contained by cost saving measures and operating efficiency gains. The jaws effect was positive by 2.1 points.

The cost of risk[(2)] totalled EUR 146 million (EUR 123 million in 2018).

Thus, the pre-tax income of these five businesses, after allocating one-third of Luxembourg Private Banking's net income to the Wealth Management business (International Financial Services division), rose significantly by 9.5% compared to 2018, at EUR 1,165 million, reflecting the good drive of the businesses.

(1) At constant scope and exchange rates.

(2) Including 100% of Private Banking Private Banking in Luxembourg.

INTERNATIONAL FINANCIAL SERVICES

In millions of euros	2019	2018	2019/2018
Revenues	**17,183**	**16,076**	**+6.9%**
Operating Expenses and Dep.	(10,507)	(10,054)	+4.5%
Gross Operating Income	**6,676**	**6,022**	**+10.9%**
Cost of Risk	(1,911)	(1,566)	+22.0%
Operating Income	**4,765**	**4,456**	**+6.9%**
Share of Earnings of Equity-Method Entities	488	489	-0.2%
Other Non Operating Items	(27)	58	n.s.
Pre-Tax Income	**5,226**	**5,003**	**+4.5%**
Cost/Income	61.1%	62.5%	-1.4pt
Allocated Equity *(€bn)*	29.2	27.3	+6.8%

For the whole of 2019, International Financial Services continued its strong growth and deployed sustained business activity: outstanding loans were up 8.1% compared to 2018 (+5.1% at constant scope and exchange rates) with good growth at Personal Finance and Europe-Mediterranean. The division reported +EUR 20.2 billion in net asset inflows, with particularly good asset inflows at Wealth Management as well as in Insurance notably in unit-linked policies. Assets under management of the savings and insurance businesses totalled EUR 1,123 billion (+9.3% compared to 31 December 2018).

The IFS division strengthens the leading positions of its businesses, at the core of the integrated model (Personal Finance: the number 1 consumer credit specialist in Europe in 33 countries; the Europe-Mediterranean and BancWest networks with more than 15 million customers; BNP Paribas Cardif: global leader in creditor protection insurance, present in 34 countries; the number 1 private bank in the eurozone; and BNP Paribas Asset Management: a global asset manager, leader in sustainable finance). It is developing new growth-generating partnerships at Personal Finance (Opel in Poland, Volvo in Italy, BYmyCAR in France, Ford in several European countries, Carrefour in Italy, Leroy Merlin in Brazil) and in Insurance (strategic alliance with ScotiaBank, and with Sainsbury's Bank and Argos).

The IFS division optimises customer service through digitalisation. In its international retail networks, it already has EUR 3.9 million digital customers. It is successfully developing new digital solutions to support its clients: 85% of the transactions at Personal Finance are performed in self-care, the digitalised creditor protection insurance journey is a success in France for Cardif (90% of immediate responses for personal insurance and 80% of immediate responses for collective insurance), 48% of clients actively use digital channels at Wealth Management[(1)]. The division is incorporating open innovation and new technologies in co-creation with start-ups, relying in particular on Station F, one of the largest start-up accelerators worldwide. BNP Paribas Plug and Play, accelerated 47 projects at Station F with 36 start-ups and an industrialisation rate of 35% among the best in the Fintech ecosystem. It also has doubled the capacity of Bivwak, a European set up for project acceleration created by BNP Paribas in 2017 based on agile development of innovative solutions for our clients and skill improvement of our employees. Finally, it is constantly developing robotics (more than 760,000 transactions a month processed by robots). 150 projects using artificial intelligence are already operational or in development.

The division's revenues, at EUR 17,183 million, were up 6.9% compared to 2018. At constant scope and exchange rates, they rose by 4.7% in connection with the good drive at Personal Finance and the very good performance of insurance and the Europe-Mediterranean banking networks.

Operating expenses, at EUR 10,507 million, were up 4.5%. At constant scope and exchange rates, they rose by only 1.5%, the rise being contained by the contribution of cost saving measures and operating efficiency gains. The jaws effect was positive at 2.4 points.

Gross operating income thus came in at EUR 6,676 million, up 10.9% compared to 2018 (+10.4% at constant scope and exchange rates).

The cost of risk, at EUR 1,911 million, was up EUR 344 million compared to 2018. It increased by EUR 309 million at constant scope and exchange rates.

International Financial Services' pre-tax income thus came in at EUR 5,226 million, up 4.5% compared to 2018 (+6.7% at constant scope and exchange rates).

(1) Wealth Management clients with at least one connection per month.

PERSONAL FINANCE

In millions of euros	2019	2018	2019/2018
Revenues	**5,796**	**5,533**	**+4.8%**
Operating Expenses and Dep.	(2,857)	(2,764)	+3.3%
Gross Operating Income	**2,939**	**2,768**	**+6.2%**
Cost of Risk	(1,354)	(1,186)	+14.2%
Operating Income	**1,585**	**1,583**	**+0.1%**
Share of Earnings of Equity-Method Entities	41	62	-34.3%
Other Non Operating Items	(23)	2	n.s.
Pre-Tax Income	**1,602**	**1,646**	**-2.7%**
Cost/Income	49.3%	50.0%	-0.7pt
Allocated Equity *(€bn)*	7.9	7.3	+8.8%

For the whole of 2019, Personal Finance continued to grow: outstanding loans grew by 9.2%, driven by a business drive in Europe and in connection with partnerships. This increase in volumes was accompanied by a good control of margins at production. In 2019, the business executed four securitisation transactions[1] in Europe for a total amount of EUR 3.8 billion. It signed a pan-European agreement (Netherlands, Belgium, Luxembourg, Poland) with Ford Europe for a 5-year period and a partnership with Arval in the United Kingdom for a car inventory financing solution for car dealers. Its partnership with Opel in new countries (Poland, Netherlands and Spain) got off to a good start in 2019.

Personal Finance's revenues, at EUR 5,796 million, were up 4.8% compared to 2018 in connection with the rise in volumes and growth sustained in particular by the very good drive in Italy, Spain and Germany.

Operating expenses, at EUR 2,857 million, were up 3.3% compared to 2018 due to the support of increased business and thanks to cost saving measures. The jaws effect was positive at 1.4 point and the cost income ratio improved by 0.7 point compared to 2018.

Gross operating income thus came in at EUR 2,939 million, up 6.2% compared to 2018.

The cost of risk came in at EUR 1,354 million, up EUR 169 million compared to 2018 in connection with the rise of outstandings. At 145 basis points of outstanding customer loans, it was still low.

Personal Finance's pre-tax income thus came in at EUR 1,602 million, down 2.7% compared to 2018. It was down 0.6% excluding a non-recurring item in an associated company.

EUROPE-MEDITERRANEAN

In millions of euros	2019	2018	2019/2018
Revenues	**2,699**	**2,358**	**+14.5%**
Operating Expenses and Dep.	(1,799)	(1,605)	+12.1%
Gross Operating Income	**900**	**753**	**+19.6%**
Cost of Risk	(399)	(308)	+29.6%
Operating Income	**502**	**445**	**+12.6%**
Other Non Operating Items	231	241	-4.1%
Pre-Tax Income	**733**	**686**	**+6.7%**
Income Attributable to Wealth and Asset Management	(4)	(3)	+60.7%
Pre-Tax Income of Other Domestic Markets	**728**	**684**	**+6.5%**
Cost/Income	66.6%	68.1%	-1.5pt
Allocated Equity *(€bn)*	5.3	4.8	+11.5%

Including 100% of Turkish Private Banking for the Revenue to Pre-tax income line items.

For the whole of 2019, Europe-Mediterranean reported a good overall performance with business drives sustained by the universal banking model and the strengthening of franchises. Europe-Mediterranean's outstanding loans were up 1.4%[2] compared to 2018, with particularly good growth in Poland and Morocco. For their part, deposits were up 1.2%[2]. The business successfully completed the operational integration of Raiffeisen Bank Polska and generated the cost synergies expected.

(1) Non-deconsolidating.

(2) At constant scope and exchange rates.

At EUR 2,699 million, Europe-Mediterranean's[1] revenues rose by 6.8%[2] compared to 2018, with growth in all regions, higher volumes and margins, and a good level of fees.

Operating expenses[1], at EUR 1,799 million, rose by 1.0%[2] compared to 2018, reflecting the implementation of cost synergies in Poland in connection with the integration of Raiffeisen Bank Polska[3] (EUR 39 million realised in 2019, closure of 188 branches) and the effects of the transformation plan in all regions. The evolution of the operating expenses generated a largely positive jaws effect of 5.9 points.

The cost of risk[1] totalled EUR 399 million (+17.9%[2] compared to 2018 due to the rise in Turkey). At 98 basis points of outstanding customer loans, it remained at a moderate level.

After allocating one-third of Turkish Private Banking's net income to the Wealth Management business, Europe-Mediterranean thus generated EUR 728 million in pre-tax income, strongly up 23.1% at constant scope and exchange rates, given the high level of non-operating items in 2018 and up 6.5% at historical scope and exchange rates, due in particular to the strong depreciation of the Turkish lira between 2018 and 2019.

BANCWEST

In millions of euros	2019	2018	2019/2018
Revenues	**2,375**	**2,289**	**+3.8%**
Operating Expenses and Dep.	(1,712)	(1,682)	+1.8%
Gross Operating Income	**663**	**607**	**+9.2%**
Cost of Risk	(148)	(70)	n.s
Operating Income	**515**	**537**	**-4.2%**
Other Non Operating Items	(3)	2	n.s
Pre-Tax Income	**512**	**539**	**-5.1%**
Income Attributable to Wealth and Asset Management	(28)	(28)	+2.0%
Pre-Tax Income of Other Domestic Markets	**484**	**512**	**-5.5%**
Cost/Income	72.1%	73.5%	-1.4pt
Allocated Equity *(€bn)*	5.4	4.9	+10.4%

Including 100% of US Private Banking for the Revenues to Pre-tax income line items.

For the whole of 2019, BancWest maintained its business drive but operated in a less favourable interest rate environment. Loans grew by 1.2%[2] compared to 2018, with growth in loans to individuals and corporate customers. Deposits were up +3.9%[2] with good growth in customer deposits (+5.4%)[4].

Private Banking's assets under management (15.7 billion dollars as at 31 December 2019) were up 14.3% compared to 31 December 2018. Cooperation with CIB is expanding, with 57 deals made jointly in 2019.

At EUR 2,375 million, revenues[5] were down 1.8%[2] compared to 2018. The decrease in the interest rate margin in an environment of downward interest rates was only partially offset by an increase in business activity and fees (in particular cards and cash management).

Operating expenses[5] were down 3.6%[2], to EUR 1,712 million, due to the reduction in the headcount (-7.2% compared to 31 December 2018), related in particular to the mutualisation of some functions with CIB and the transfer of support functions to a lower cost area (Arizona).

Gross operating income[5], at EUR 633 million, was up 3.0%[2] compared to 2018.

The cost of risk rose by EUR 78 million compared to a low base in 2018. At 27 basis points of outstanding customer loans, it remained low.

Thus, after allocating one-third of U.S. Private Banking's net income to the Wealth Management business, BancWest posted EUR 484 million in pre-tax income, down 10.0% compared to 2018 at constant scope and exchange rates but down only 5.5% at historical scope and exchange rates given a positive foreign exchange effect.

(1) Including 100% of Private Banking in Turkey.

(2) At constant scope and exchange rates.

(3) Acquisition on 31 October 2018 of the core banking activities of Raiffeisen Bank Polska (excluding mortgage loans in foreign currencies and a limited number of other assets).

(4) Deposits excluding treasury activities.

(5) Including 100% of Private Banking in the United States.

INSURANCE AND WEALTH & ASSET MANAGEMENT

INSURANCE

In millions of euros	2019	2018	2019/2018
Revenues	**3,068**	**2,680**	**+14.5%**
Operating Expenses and Dep.	(1,500)	(1,406)	+6.7%
Gross Operating Income	**1,568**	**1,273**	**+23.1%**
Cost of Risk	(3)	3	n.s.
Operating Income	**1,564**	**1,276**	**+22.6%**
Share of Earnings of Equity-Method Entities	167	202	-17.3%
Other Non Operating Items	(15)	1	n.s.
Pre-Tax Income	**1,716**	**1,479**	**+16.0%**
Cost/Income	48.9%	52.5%	-3.6pt
Allocated Equity *(€bn)*	8.4	8.4	+0.2%

WEALTH & ASSET MANAGEMENT

In millions of euros	2019	2018	2019/2018
Revenues	**3,320**	**3,286**	**+1.0%**
Operating Expenses and Dep.	(2,682)	(2,636)	+1.7%
Gross Operating Income	**638**	**650**	**-1.9%**
Cost of Risk	(6)	(6)	+0.2%
Operating Income	**632**	**644**	**-1.9%**
Share of Earnings of Equity-Method Entities	57	37	+54.5%
Other Non Operating Items	7	1	n.s.
Pre-Tax Income	**695**	**681**	**+2.0%**
Cost/Income	80.8%	80.2%	+0.6pt
Allocated Equity *(€bn)*	2.1	1.9	+7.1%

For the whole of 2019, the Insurance and Wealth and Asset Management businesses continued their growth. Assets under management(1) reached EUR 1,123 billion at 31 December 2019. They rose by 9.3% compared to 31 December 2018 due in particular to a very favourable performance effect: +EUR 79.7 billion on the back of the rebound of financial markets. Net asset inflows came in at +EUR 20.2 billion with good net asset inflows at Wealth Management in Asia, Germany and Belgium, slight asset outflows in Asset Management due to money market funds, good net asset inflows in Real Estate Investment Management in Germany and in France and, lastly, good asset inflows in insurance in particular in unit-linked policies. The foreign exchange effect was favourable (+EUR 3.3 billion) and a scope effect unfavourable (-EUR 3.6 billion) in connection with the deconsolidation of SBI Life.

As at 31 December 2019, assets under management(1) broke down as follows: Asset Management (EUR 470 billion, including EUR 30 billion from Real Estate Investment Management), Wealth Management (EUR 393 billion), and Insurance (EUR 260 billion).

Insurance continued the development of its business, diversifying its asset inflows in savings with an increasing share of unit-linked policies in particular in France and Asia, by developing volumes of protection insurance in Europe and Latin America, and property and casualty insurance in the FRB network via Cardif IARD. The business continues to strengthen its partnerships through the signing of strategic alliances with Scotiabank in four countries in Latin America, with Famsa, a leading retailer in Mexico, and with Sainsbury's Bank and Argos to develop pet insurance in the United Kingdom.

(1) Including distributed assets.

Insurance's revenues, at EUR 3,068 million, rose by 14.5% compared to 2018 driven by a favourable effect of rising markets and good business drive. Operating expenses, at EUR 1,500 million, rose by 6.7% as a result of business development. Despite the scope effect related to the deconsolidation of SBI Life, pre-tax income was up 16.0% compared to 2018, at EUR 1,716 million.

In Wealth and Asset Management, the global expertise of Wealth Management continued to be recognised, being named Best Private Bank in the World (Global Finance) and Best Global European Private Bank (Private Banker International). The Asset Management business continued to evolve and amplified the adaptation of its organisation, the successful roll-out of the Aladdin global operational investment system and the development of new solutions (ESG, quantitative solutions, multi-assets, real assets, etc.).

Wealth and Asset Management's revenues (EUR 3,320 million) were up 1.0% compared to 2018 with a continuous improvement during the year after a difficult first quarter due to the financial market crisis at the end of 2018 and with a very good performance of Real Estate Services at the end of the year. Operating expenses totalled EUR 2,682 million. They rose by 1.7% compared to 2018 thanks to the measures of the transformation plan, in particular in Asset Management (gradually decommissioning 50 applications after the successful roll-out of the Aladdin solution). At EUR 695 million, Wealth and Asset Management's pre-tax income, after receiving one-third of the net income of Private Banking's net income in the domestic markets, in Turkey and in the United States, was thus up 2.0% compared to 2018.

CORPORATE AND INSTITUTIONAL BANKING (CIB)

In millions of euros	2019	2018	2019/2018
Revenues	**12,080**	**10,829**	**+11.6%**
Operating Expenses and Dep.	(8,663)	(8,163)	+6.1%
Gross Operating Income	**3,417**	**2,666**	**+28.2%**
Cost of Risk	(218)	(43)	n.s.
Operating Income	**3,200**	**2,623**	**+22.0%**
Share of Earnings of Equity-Method Entities	16	59	-72.7%
Other Non Operating Items	(9)	0	n.s.
Pre-Tax Income	**3,207**	**2,681**	**+19.6%**
Cost/Income	71.7%	75.4%	-3.7pt
Allocated Equity *(€bn)*	21.7	20.8	+4.3%

GLOBAL MARKETS

In millions of euros	2019	2018	2019/2018
Revenues	**5,571**	**4,727**	**+17.9%**
Incl. FICC	*3,563*	*2,719*	*+31.1%*
Incl. Equity & Prime Services	*2,007*	*2,008*	*-0.0%*
Operating Expenses and Dep.	(4,231)	(3,937)	+7.5%
Gross Operating Income	**1,339**	**790**	**+69.6%**
Cost of Risk	2	(19)	n.s.
Operating Income	**1,341**	**771**	**+74.0%**
Share of Earnings of Equity-Method Entities	3	3	-20.7%
Other Non Operating Items	(9)	(2)	n.s.
Pre-Tax Income	**1,334**	**772**	**+72.9%**
Cost/Income	76.0%	83.3%	-7.3pt
Allocated Equity *(€bn)*	8.3	7.8	+6.5%

SECURITIES SERVICES

In millions of euros	2019	2018	2019/2018
Revenues	**2,198**	**2,179**	**+0.9%**
Operating Expenses and Dep.	(1,833)	(1,733)	+5.7%
Gross Operating Income	**365**	**446**	**-18.1%**
Cost of Risk	4	8	-44.5%
Operating Income	**369**	**453**	**-18.5%**
Non Operating Items	0	0	n.s.
Pre-Tax Income	**370**	**454**	**-18.5%**
Cost/Income	83.4%	79.5%	+3.9pt
Allocated Equity *(€bn)*	0.9	0.9	+8.6%

CORPORATE BANKING

In millions of euros	2019	2018	2019/2018
Revenues	**4,312**	**3,923**	**+9.9%**
Operating Expenses and Dep.	(2,599)	(2,493)	+4.2%
Gross Operating Income	**1,713**	**1,430**	**+19.8%**
Cost of Risk	(223)	(32)	n.s.
Operating Income	**1,490**	**1,399**	**+6.5%**
Non Operating Items	13	57	-76.8%
Pre-Tax Income	**1,503**	**1,456**	**+3.2%**
Cost/Income	60.3%	63.5%	-3.2pt
Allocated Equity *(€bn)*	12.5	12.2	+2.6%

For the whole of 2019, CIB strengthens its leading positions on targeted corporate and institutional client bases and gained market shares. CIB ranked No. 3 among the CIBs in EMEA (Europe, Middle East and Africa) based on revenues generated in the first nine months of 2019, thus making it the leading European player behind two U.S. institutions.

With the success of its development plans in selected European countries, the division confirms its leading positions on the Corporate segment, with over 260 new large corporate group clients since 2016, in particular in targeted countries (Germany, United Kingdom, Netherlands and Scandinavia) and almost 1,500 new client relationships with subsidiaries of multinational clients in 2019. It continued to develop its franchises in the Asia-Pacific and the Americas regions with reinforced cooperation with BancWest. Major initiatives were also launched in 2019 to intensify business development with institutional clients. The division is thus strengthening its position with fund managers via the firm agreement with Deutsche Bank signed on 13 November 2019 on the transfer of prime brokerage and electronic execution while ensuring service continuity to clients; the transition period started with the first transfers of teams. The division also continued the optimisation of certain activities, with the signing of an agreement to transfer fund distribution activities to Allfunds, one of the leading platforms in this sector worldwide ("Wealthtech"), in exchange for a strategic stake of 22.5%[1].

The division intensified cooperation with all the Group's businesses and capitalised on the close relations enhanced by the integrated model with joint initiatives in transaction banking. It expanded its proposal of CIB solutions to major Domestic Markets and IFS clients with a global and joint approach to all the Group's businesses. More than EUR 2.8 billion in revenues per year were generated by Domestic Markets and IFS from the clients covered by CIB, over EUR 500 million are generated by CIB from the clients covered by Domestic Markets and IFS.

The digitalisation of customer services is increasing with more than 11,500 corporate clients on the Centric platform in 2019, more than EUR 21 million electronic orders processed in 2018 for Global Market clients and over 6,000 institutional clients on the Securities Services Neolink platform. The digitalisation and automation of processes as well as the ramping up of service platforms support the improvement of operating efficiency.

Thus, as announced in early 2019, CIB stepped up its transformation plan, generating EUR 298 million in recurring savings in 2019.

(1) Subject to the approval of the regulatory authorities and the necessary authorisations.

The division's revenues, at EUR 12,080 million, rose by 11.6% compared to 2018 with growth in the three businesses and very good performances by Global Markets and Corporate Banking.

Global Markets' revenues, at EUR 5,571 million, were up 17.9% compared to 2018 and 20.7% excluding the effect of the creation of the new Capital Markets platform(1). The business reported very sustained business growth based on market share gains in particular in FICC(2).

The VaR, which measures the level of market risks, was still at a very low level (EUR 26 million).

FICC's revenues(2), at EUR 3,563 million, were up 31.1% (+36.0% excluding the effect of the creation of the new Capital Markets platform(1)) compared to 2018, due to a sharp rise in primary markets and credit, a strong rebound in forex and emerging markets and a very good performance in rates.

Equity and Prime Services' revenues, at EUR 2,007 million, were stable compared to 2018, with a gradual recovery in 2019 from a low point at the end of 2018 and a good performance on equity derivatives, in particular on structured products.

Global Markets confirmed its strong positions on bond issues (number 1 in the EMEA region, number 1 for all bond issues in euro, and number 8 for all international issues) and on multi-dealer platforms (top 3 on euro credit derivatives and emerging market bonds in local currencies and top 5 on swaps and euro bonds). The expertise of the business was recognised: BNP Paribas was named Currency Derivatives House of the Year and Eurobond House of the Year (Risk Award 2019).

Securities Services' revenues, at EUR 2,198 million, were up 0.9% compared to 2018 (+3.0% excluding non-recurring items) as a result of asset growth (+8.2% on average compared to 2018), transactions up (+2.3% on average) and strong growth in the Asia region (+18% compared to 2018). Assets under custody and administration were up sharply 12.2% compared to 31 December 2018 due in particular to the integration of Janus Henderson's assets in the United States since the end of March. Furthermore, the expertise of the business was widely recognised as Transaction Bank of the Year for securities service activities according to The Banker magazine and Custodian of the Year according to AsiaRisk magazine.

Corporate Banking's revenues, at EUR 4,312 million, rose by 9.9% compared to 2018 (+6.5% excluding the effect of the creation of the Capital Markets platform(1)). The strong development of the business was driven in particular by the very good business development in Europe in connection with the use of the Capital Markets platform by clients (+12.8% compared to 2018) ramping up, the strong rise in fees (+7.2% compared to 2018) and the 7.5%(3) increase in outstanding loans to EUR 146 billion. The business is the leading European player in Investment Banking in the Europe, Middle East & Africa region, number 1 in Europe for large companies in Corporate Banking, cash management and trade finance.

CIB's operating expenses, at EUR 8,663 million, rose by 6.1% compared to 2018, a rise linked to the strong business growth, nevertheless contained by the effect of cost saving measures (development of mutualised platforms, optimisation of processes, etc.). The jaws effect was largely positive (+5.5 points).

CIB's gross operating income was thus up 28.2%, at EUR 3,417 million.

The cost of risk for CIB was still low, at EUR 218 million. It rose by EUR 175 million compared to 2018, which had benefited from many provision write-backs.

CIB thus generated EUR 3,207 million in pre-tax income, sharply up 19.6%, reflecting the solid growth in business combined with the success of its transformation.

(1) Global Markets and Corporate Banking shared platform for corporate finance introduced in the first quarter 2019 (transfer of €136m of revenues from Global Markets to Corporate Banking in 2018).

(2) Fixed Income, Currencies and Commodities.

(3) Average outstandings at constant scope and exchange rates.

CORPORATE CENTRE

In millions of euros	2019	2018
Revenues	**71**	**479**
Operating Expenses and Dep.	(1,728)	(1,965)
Including Restructuring, Transformation and Adaptation Costs	*(1,217)*	*(1,235)*
Gross Operating Income	**(1,657)**	**(1,486)**
Cost of Risk	(58)	(110)
Operating Income	**(1,715)**	**(1,596)**
Share of Earnings of Equity-Method Entities	81	84
Other Non Operating Items	786	353
Pre-Tax Income	**(848)**	**(1,159)**

For the whole of 2019, Corporate Centre revenues amounted to EUR 71 million compared to EUR 479 million in 2018, which included First Hawaiian Bank's contribution of EUR 359 million(1).

Operating expenses totalled EUR 1,728 million compared to EUR 1,965 million in 2018. They included the exceptional impact of EUR 744 million in transformation costs (EUR 1,106 million in 2018), EUR 311 million in restructuring costs(2) (EUR 129 million in 2018) and EUR 162 million in additional businesses' adaptation measures (departure plans)(3) (0 in 2018). In 2018, they included EUR 189 million in operating expenses of First Hawaiian Bank.

The cost of risk was EUR 58 million, down EUR 51 million compared to 2018 when it included EUR 13 million in the cost of risk of First Hawaiian Bank.

Other non-operating items totalled EUR 786 million compared to EUR 353 million in 2018. They included the exceptional impact of the capital gain realised from the sale of 16.8% of SBI Life in India, followed by the deconsolidation of the residual stake (+EUR 1,450 million), the capital gain realised from the sale of a building for +EUR 101 million, and the impairments of goodwill (-EUR 818 million). They included in 2018 the exceptional impact of a +EUR 101 million capital gain realised from the sale of a building, and the 286 million euro capital gain realised from the sale of 30.3% from First Hawaiian Bank.

The Corporate Centre's pre-tax income thus came in at -EUR 848 million compared to -EUR 1,159 million in 2018.

(1) Reminder: First Hawaiian Bank (FHB) no more fully consolidated from 1 August 2018 and its contribution to the income statement reallocated retroactively to the Corporate Centre effective from 1 January 2018 (see new quarterly series published on 29 March 2019).

(2) Restructuring costs related in particular to the integration of Raiffeisen Bank Polska and the discontinuation or restructuring of certain businesses (in particular BNP Paribas Switzerland).

(3) Related in particular to BNL bc, Asset Management and BancWest.

3.3 Balance sheet

ASSETS

OVERVIEW

As at 31 December 2019, the total consolidated balance sheet of the BNP Paribas Group amounted to EUR 2,164.7 billion, up 6% from 31 December 2018 (EUR 2,040.8 billion). The Group's main assets include cash and balances at central banks, financial instruments at fair value through profit or loss, loans and advances to customers, debt securities at amortised cost or at fair value through equity, financial investments of insurance activities and accrued income and other assets, which, together, account for 95% of total assets at 31 December 2019 (96% at 31 December 2018). The 6% increase in assets is mainly due to the increase of:

- financial instruments at fair value through profit or loss, which increase by EUR 37.6 billion, or 7%, mainly as a result of the increase in reverse repurchase agreement operations and derivative financial instruments;
- financial assets at amortised cost which increase by EUR 75.4 billion, or 9%, mainly as a result of the increase of loans and advances to customers by 5% (+ EUR 39.9 billion to reach EUR 805.8 billion as 31 December 2019) and the increase of debt securities by 44% (+ EUR 33.4 billion to reach EUR 108.5 billion as 31 December 2019).

CASH AND BALANCES AT CENTRAL BANKS

Cash and central banks account for EUR 155.1 billion at 31 December 2019, down 16.2% from 31 December 2018 (EUR 185.1 billion).

FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets recognised at market or model value through profit or loss are composed of trading portfolios, of financial derivatives and certain assets not held for trading purposes which characteristics do not permit recognition at amortised cost or at fair value through equity. Financial assets in the trading portfolio include securities, loans and repurchase agreements.

These assets are measured at market or model value at each balance sheet date.

Total financial instruments at market value by profit and loss increased by 7% (+EUR 37.6 billion) compared to 31 December 2018.

This increase is mainly due to the 8% increase in securities portfolio (EUR +9.9 billion to EUR 131.9 billion at 31 December 2019), as well as the increase in loans and repo operations by 7% (EUR +13.2 billion to EUR 196.9 billion at 31 December 2019), and the rise in derivative financial instruments by 6% (EUR +14.3 billion to EUR 247.2 billion at 31 December 2019).

LOANS AND ADVANCES TO CUSTOMERS

Loans and advances to customers are divided into ordinary accounts, customer loans, reverse repurchase agreements and finance leases.

Loans and advances to customers (net of impairment) amounted to EUR 805.8 billion as at 31 December 2019, compared to EUR 765.9 billion as at 31 December 2018, increasing by 5%. This is due to the increase in loans to customers (+6%, *i.e.* EUR 734.2 billion as at 31 December 2019, compared to EUR 695.6 billion as at 31 December 2018, as well as the increase in finance leases, which amount to EUR 34.5 billion as at 31 December 2019, increasing by 7% compared to 31 December 2018. Impairment provisions were down to EUR 21.2 billion as at 31 December 2019, compared to EUR 24.1 billion as at 31 December 2018.

DEBT SECURITIES AT AMORTISED COST OR AT MARKET OR MODEL VALUE THROUGH EQUITY

Debt securities that are not held for trading purposes and which meet the cash flow criterion established by IFRS 9 are recognised:

- at amortised cost if managed to collect cash flows by collecting contractual payments over the life of the instrument; or
- at fair value through equity if held in a business model whose objective is achieved through both the collection of contractual cash flows and the sale of financial assets.

Debt securities at amortised cost

Debt securities at amortised cost are measured using the effective interest rate method. They totalled EUR 108.5 billion at 31 December 2019 (net of impairment), compared with EUR 75.1 billion at 31 December 2018, thus increasing by 44%.

Debt securities at fair value through equity

These assets are measured at market or model value through equity at each balance sheet date. They decreased by EUR 3.4 billion between 31 December 2018 and 31 December 2019, amounting to EUR 50.4 billion.

Debt securities at fair value through equity posted an unrealised gain of EUR 0.2 billion at 31 December 2019, compared with EUR 0.1 billion at 31 December 2018, an increase of EUR 0.1 billion.

FINANCIAL INVESTMENTS OF INSURANCE ACTIVITIES

Financial investments of insurance activities include:

- the financial instruments that remain recognised in accordance with IAS 39 (note 1.f of the consolidated financial statements); they include investments in representation of the technical reserves of insurance activities, including unit-linked insurance policies;
- derivatives used for hedging purposes with a positive market value;
- investment property;
- equity-method investments;
- and the share of reinsurers in liabilities related to insurance and investment contracts.

Financial investments of insurance activities amounted to EUR 257.8 billion at 31 December 2019, an increase by 11% compared to 31 December 2018. This increase is mainly due to an increase by 12% in financial instruments designated as at fair value through profit or loss (EUR 115.3 billion at 31 December 2019, compared with EUR 102.9 billion at 31 December 2018), and to an increase by 13% in available-for-sale financial assets (EUR 126.6 billion at 31 December 2019, compared to EUR 112.0 billion at 31 December 2018).

The financial assets available for sale have an unrealised gain of EUR 14.7 billion at 31 December 2019, compared with EUR 9.1 billion at 31 December 2018, an increase of EUR 5.6 billion.

ACCRUED INCOME AND OTHER ASSETS

Accrued income and other assets are divided between guarantee deposits and bank guarantees paid, collection accounts, accrued income and prepaid expenses, other debtors and miscellaneous assets.

Accrued income and other assets amounted to EUR 113.5 billion at 31 December 2019, compared with EUR 103.3 billion at 31 December 2018, up 10%. This increase is in particular related to guarantee deposits and bank guarantees paid, up by EUR 10.5 billion (+16%).

LIABILITIES

OVERVIEW

The Group's liabilities (excluding equity) amounted to EUR 2,052.9 billion at 31 December 2019, up 6% from 31 December 2018 (EUR 1,935.1 billion). The Group's main liabilities consist of financial instruments at fair value through profit or loss, deposits from customers, debt securities, accrued expenses and other liabilities, and technical reserves and other insurance liabilities. These items together accounted for 93% of the Group's total liabilities (excluding shareholders' equity) at 31 December 2019 (94% at 31 December 2018). The 6% increase in liabilities is mainly due to:

- the 4% or EUR 22.3 billion increase in financial instruments at fair value through profit or loss (EUR 582.2 billion at 31 December 2019);
- the 5% or EUR 38.1 billion rise in deposits from customers (EUR 834.7 billion as at 31 December 2019);
- the 11% or EUR 23.2 billion rise in technical reserves and other insurance liabilities (EUR 236.9 billion as at 31 December 2019).

FINANCIAL INSTRUMENTS AT FAIR OR MODEL VALUE THROUGH PROFIT OR LOSS

The trading portfolio consists mainly of sales of borrowed securities, repurchase agreements and financial derivatives. Financial liabilities designated as at fair or model value through profit or loss are mainly composed of issues originated and structured on behalf of clients, where the risk exposure is managed in combination with the hedging strategy. These types of issuances contain significant embedded derivatives, which changes in value are offset by changes in value of the hedging instrument.

Total financial instruments at fair value through profit or loss rose by 4% (EUR +22.3 billion 31 December 2019) compared to 31 December 2018. This increase is mainly due to the increase in debt securities of 16% (EUR +9 billion to EUR 64 billion in 31 December 2019), the increase in repurchase agreement operations by 5.4% (EUR +11 billion to EUR 215.1 billion at 31 December 2019), and financial derivatives of 5.4% (EUR +12.1 billion to EUR 237.9 billion at 31 December 2019), partially offset by a decrease in the securities portfolios of -13% (EUR -9.7 billion at 31 December 2019).

DEPOSITS FROM CUSTOMERS

Deposits from customers consist primarily of on-demand deposits, term accounts, savings accounts and repurchase agreements. Deposits from customers amount to EUR 834.7 billion, up EUR 38.1 billion from 31 December 2018. This is due to the 9% increase in on-demand accounts (a EUR 42.9 billion rise, to EUR 516.9 billion as at 31 December 2019) and the 6,1% decrease in term accounts by (a EUR 10.6 billion decrease, to EUR 165.0 billion at 31 December 2019).

DEBT SECURITIES

This category includes negotiable certificates of deposit and bond issues, but does not include debt securities classified as financial liabilities at fair value through profit or loss (see note 5.a of the consolidated financial statements). Debt securities are increasing from EUR 151.5 billion at 31 December 2018 to EUR 157.6 billion at 31 December 2019.

ACCRUED EXPENSE AND OTHER LIABILITIES

Accrued expense and other liabilities consist of guarantee deposits received, collection accounts, accrued expense and deferred income, lease liabilities, as well as other creditors and miscellaneous liabilities. Accrued expense and other liabilities amounted to EUR 102.7 billion at 31 December 2019, compared with EUR 89.6 billion at 31 December 2018, an increase of 15%. This increase is mainly due to guarantee deposits received (up EUR 10.4 billion, or +22%) as well as lease liabilities (EUR 3.3 billion) following the application of IFRS 16 norms (note 2 the consolidated financial statements). Accrued expenses and deferred income decreased by EUR 2.1 billion (- 21%).

TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES

Technical reserves of insurance companies increased by 11% compared to 31 December 2018 and amounted to EUR 232.3 billion at 31 December 2019 (EUR 209.8 billion at 31 December 2018), mainly due to the increase in liabilities related to insurance contracts.

MINORITY INTERESTS

Minority interests were up by EUR 0.1 billion, i.e. EUR 4.4 billion at 31 December 2019 compared with EUR 4.3 billion at 31 December 2018.

SHAREHOLDERS' EQUITY

Shareholders' equity (before dividend payout) amounts to EUR 107.5 billion as at 31 December 2019, compared with EUR 101.5 billion as at 31 December 2018. This EUR 6 billion increase is mainly attributable to the profit of the period which amounted to EUR 8.2 billion and to the EUR 1.6 billion increase in changes in assets and liabilities recognized directly in equity, partially offset by the EUR 3.8 billion dividend paid in respect of the year ended 31 December 2018.

FINANCING AND GUARANTEE COMMITMENTS

FINANCING COMMITMENTS

Financing commitments given mainly consist mostly of documentary credit, other credit confirmations and other commitments. They rose by EUR 24.4 billion compared to 31 December 2018, to EUR 329 billion at 31 December 2019.

Financing commitments given to customers rose by 8% to EUR 324.1 billion at 31 December 2019 and those given to credit institutions increased by EUR 1.8 billion to EUR 5 billion at 31 December 2019.

Financing commitments received consist mainly of financing commitments received from credit institutions in the context of refinancing from central banks.

Financing commitments received decreased by 12%, to EUR 73.4 billion at 31 December 2019, compared with EUR 83.7 billion at 31 December 2018.

GUARANTEE COMMITMENTS

Guarantee commitments given rose by EUR 3% to EUR 150.7 billion at 31 December 2019 (compared with EUR 146.6 billion at 31 December 2018); this increase comes from the guarantee commitments given to customers (a 5% increase to EUR 118.4 billion at 31 December 2019), while guarantee commitments to credit institutions decrease by 3% to EUR 32.3 billion at 31 December 2019 (compared with EUR 33.5 billion at 31 December 2018).

3.4 Profit and loss account

REVENUES

In millions of euros	Year to 31 December 2019	Year to 31 December 2018	Change (2019/2018)
Net interest income	21,127	21,062	0.3%
Net commission income	9,365	9,207	1.7%
Net gain on financial instruments at fair value through profit or loss	7,111	5,808	22.4%
Net gain on financial instruments at fair value through equity	350	315	11.1%
Net gain on derecognised financial assets at amortised cost	3	(5)	ns
Net income from insurance activities	4,437	4,064	9.2%
Net income from other activities	2,204	2,065	6.7%
REVENUES	**44,597**	**42,516**	**4.9%**

OVERVIEW

The EUR 2.0 billion increase in the Group's net banking income between 2018 and 2019 is mainly the result of a + EUR 1.3 billion variation in net gains on financial instruments at fair value through profit or loss and the EUR 0.4 billion increase in net income from insurance activities.

NET INTEREST INCOME

This line item includes net interest income and expense related to customer transactions, interbank transactions, debt instruments issued by the Group, cash flow hedge instruments, derivatives used for interest-rate portfolio hedge, debt securities at amortised cost or at fair value through equity, and non-trading instruments at fair value through profit or loss.

More specifically, the "Net interest income" line item includes:

- net interest income from loans and advances, including interest, transaction costs, fees and commissions included in the initial value of the loan. These items are calculated using the effective interest method, and recognised in the profit and loss account over the life of the loan;
- net interest income from debt securities held by the Group, which are measured at amortised cost or at fair value through equity (for the interest calculated using the effective interest method), and from non-trading debt securities at fair value through profit or loss (for the contractual accrued interest);
- net interest income from cash flow hedges, which are used in particular to hedge the interest rate risk on variable-rate assets and liabilities. Changes in the fair value of cash flow hedges are recorded in equity. The amounts recorded in equity over the life of the hedge are transferred to "Net interest income" as and when the cash flows from the hedged item are recognised as profit or loss in the income statement.

Interest income and expense on fair value hedge derivatives are included with the interest generated by the hedged item. Similarly, interest income and expense arising from derivatives used for economic hedge of transactions designated as at fair value through profit or loss are allocated to the same line items as the interest income and expense relating to the underlying transactions.

The main factors affecting the level of net interest income are the relative volumes of interest-earning assets and interest-bearing liabilities and the spread between lending and funding rates. Net interest income is also affected by the impact of hedging transactions, and, to a lesser extent, exchange rate fluctuations.

Volumes of interest-earning assets and interest-bearing liabilities can be affected by various factors, in addition to general market conditions and growth in the Group's lending activities (either organically or through acquisitions). One such factor is the Group's business mix, such as the relative proportion of capital allocated to interest-generating as opposed to fee-generating businesses.

The other principal factor affecting net interest income is the spread between lending and funding rates, which itself is influenced by several factors. These include central bank funding rates (which affect both the yield on interest-earning assets and the rates paid on sources of funding, although not always in a linear and simultaneous manner), the proportion of funding sources represented by non-interest bearing customer deposits, government decisions to raise or lower interest rates on regulated savings accounts, the competitive environment, the relative weight of the Group's various interest-bearing products, which have different margins as a result of different competitive environments, and the Bank's hedging strategy and accounting treatment of hedging transactions.

Net Interest income increased by 0.3% to EUR 21,127 million for the year ended 31 December 2019. This variation is mainly attributable to the decrease in income from loans, deposits and borrowings (EUR 18,707 million for the year ended 31 December 2019, compared with EUR 18,888 million for the year ended 31 December 2018) and to the increase in net expense on debt issued by the Group (EUR 3,021 million for the year ended 31 December 2019, compared with EUR 2,281 million for the year ended 31 December 2018), partially offset by the increase in net income from debt securities at amortised cost and at fair value through equity (EUR 2,417 million in 2019, compared with EUR 1,659 million in 2018).

Besides, expense on financial instruments designated as at fair value through profit or loss decreased from EUR 442 million in 2018 to EUR 347 million in 2019, net revenues of cash flow hedge instruments increased by EUR 15 million compared with the year ended 31 December 2018, and net revenues of interest rate portfolio hedge instruments increased by EUR 86 million.

NET COMMISSION INCOME

Net commission income includes commissions on customer transactions, securities and derivatives transactions, financing and guarantee commitments, and asset management and other services. Net commission income increased by 1.7%, from EUR 9,207 million in 2018 to EUR 9,365 million in 2019.

Insurance activity fees are included in "Net income from insurance activities".

NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR OR MODEL VALUE THROUGH PROFIT OR LOSS

This line item includes all profit and loss items relating to financial instruments managed in the trading book, to financial instruments designated as at fair value through profit or loss by the Group under the fair value option and to non-trading debt securities that do not meet the IFRS 9 criteria required to be recognised at amortised cost or at fair value through equity (other than interest income and expense on the last two categories, which are recognised under "Net interest income" as presented above). It also includes gains and losses on non-trading equity instruments that the Group did not choose to measure at fair value through equity. This includes both capital gains and losses on the sale and the marking to fair value of these instruments, along with dividends from equity securities.

This line item also includes gains and losses due to the ineffectiveness of fair value hedges, cash flow hedges, and net foreign investment hedges.

The gains and losses resulting from cash flows and the remeasurement of financial instruments, either cash or derivatives, must be appreciated as a whole in order to give a fair representation of the profit or loss resulting from trading activities.

Net gains on financial instruments as at fair value through profit or loss increase by 22.4% from EUR 5,808 million for the year ended 31 December 2018 to EUR 7,111 million for the year ended 31 December 2019.

The income from items designated as at fair value through profit or loss are partly offset by changes in value of the derivative instruments hedging these assets.

Since 2018, this line item also includes gains and losses on equity securities that the Group did not choose to classify as at "fair value through equity" under IFRS 9. The net gains represent EUR 580 million for the year ended 31 December 2019 and EUR 571 million for the year ended 31 December 2018.

NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH EQUITY

For the year 2019, net gains on financial instruments at fair value through equity correspond to gains and losses realised on debt securities recognised at fair value through equity and to dividends from equity securities that the Group chose to recognise at fair value through equity.

Changes in fair value of these assets are initially recognised under "Changes in assets and liabilities recognised directly in equity". Upon sale of these assets, realised gains or losses are recognised in the profit or loss account under "Net gains on financial instruments at fair value through equity" for debt securities, or transferred to retained earnings for equity securities.

Net gains on financial instruments at fair value through equity amounted to EUR 350 million in 2019 and EUR 315 million in 2018.

NET INCOME FROM INSURANCE ACTIVITIES

Net income from insurance activities rose by 9.2% compared to 2018, amounting to EUR 4,437 million. Its main components are: gross written premiums, net income from financial investments, technical charges related to contracts, policy benefit expenses and net charges from ceded reinsurance.

The change in net income from insurance activities is due to increase of net gains from financial investments which correspond to a net gain of EUR 14,858 million in 2019 and to a net loss of -EUR 2,133 million in 2018, offset by a 75.4% an increase of in technical charges which amount to -EUR 32,423 million for the year ended 31 December 2019, compared to -EUR 18,487 million for the year ended 31 December 2018.

NET INCOME FROM OTHER ACTIVITIES

This item includes, among other things, net income from investment property, assets held under operating lease and property development activities. Net income from other activities increased by 7%, from EUR 2,065 million in 2018 to EUR 2,204 million in 2019. This change is mainly due to a EUR 119 million increase in net income from assets held under operating lease.

OPERATING EXPENSES, AMORTISATION AND DEPRECIATION OF FIXED AND INTANGIBLE ASSETS

In millions of euros	Year to 31 December 2019	Year to 31 December 2018	Change (2019/2018)
Salary and employee benefit expense	(17,553)	(16,617)	6%
Other operating expenses	(11,339)	(12,290)	-8%
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	(2,445)	(1,676)	46%
TOTAL OPERATING EXPENSES, DEPRECIATION, AND AMORTISATION	**(31,337)**	**(30,583)**	**2%**

Operating expenses, depreciation and amortisation are increasing by 2%, from EUR 30,583 million in 2018 to EUR 31,337 million in 2019.

GROSS OPERATING INCOME

The Group's gross operating income rose by 11% to EUR 13,260 million for the year ended 31 December 2019 (compared with EUR 11,933 million for the year ended 31 December 2018), mainly due to the 5% increase in revenues.

COST OF RISK

In millions of euros	Year to 31 December 2019	Year to 31 December 2018	Change (2019/2018)
Net allowances to impairment	(2,649)	(2,490)	6%
Recoveries on loans and receivables previously written off	429	483	-11%
Irrecoverable loans and receivables not covered by impairment provisions	(983)	(757)	30%
TOTAL COST OF RISK FOR THE PERIOD	**(3,203)**	**(2,764)**	**16%**

This line item represents the net amount of impairment losses recognised for credit risks inherent in the Group's intermediation activities, as well as any impairment loss relating to counterparty risks on over-the-counter derivative instruments.

The Group's cost of risk amounts to EUR 3,203 million, an increase of 16% compared to 2018.

The increase of cost of risk in 2019 is mainly due to the contribution of IFS activities, with net allowances of EUR 1,911 million in 2019 (compared to EUR 1,566 million in 2018), increasing by 22%, mainly linked to Personal Finance, whose cost of risk amounts to EUR 1,354 million (compared to EUR 1,186 million in 2018).

As at 31 December 2019, the total amount of doubtful loans, securities and commitments, net of collateral, amounts to EUR 23.1 billion (compared to EUR 26.2 billion as at 31 December 2018), and the related impairment amounts to EUR 17.1 billion, compared to EUR 19.9 billion as at 31 December 2018. The coverage ratio is 74% at 31 December 2019, compared to 76% at 31 December 2018.

More detailed information on the cost of risk per business line is available in the "Core business results" section.

NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS

In millions of euros	Year to 31 December 2019	Year to 31 December 2018	Change (2019/2018)
OPERATING INCOME	**10,057**	**9,169**	**10%**
Share of earnings of equity-method entities	586	628	-7%
Net gain on non-current assets	1,569	358	x4,4
Goodwill	(818)	53	ns
Corporate income tax	(2,811)	(2,203)	28%
Net income attributable to minority interests	(410)	(479)	-14%
NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS	**8,173**	**7,526**	**9%**

SHARE OF EARNINGS OF EQUITY-METHOD ENTITIES

The share of earnings of equity-method entities decreased from EUR 628 million in 2018 to EUR 586 million in 2019.

NET GAIN ON NON-CURRENT ASSETS

This item includes net realised gains or losses on sales of tangible and intangible assets used in operations and on sales of investments in consolidated undertakings.

Net gains on fixed assets increased by EUR 1,211 million (EUR 1,569 million in 2019 compared with EUR 358 million in 2018). The main capital gains realised relate to the partial sale of SBI Life in 2019 for EUR 1,450 million and of First Hawaiian Bank in 2018 for EUR 286 million.

CHANGE IN VALUE OF GOODWILL

Changes in the value of goodwill amounted to -EUR 818 million in 2019 (including a partial goodwill impairment of BancWest for EUR 500 million), compared with EUR 53 million in 2018 (including a EUR 68 million negative goodwill on the "Core bank" activity of Raiffeisen Polska).

INCOME TAX EXPENSE

The Group records an income tax expense of EUR 2,811 million in 2019, up from the amount of EUR 2,203 million recorded in 2018.

MINORITY INTERESTS

The share of earnings attributable to minority interests in consolidated companies decreased by EUR 69 million (to EUR 410 million in 2019 compared with EUR 479 million in 2018).

3.5 Recent events

PRODUCTS AND SERVICES

BNP Paribas regularly introduces new products and services for its customers. More information is available on the Group's websites, including in the press releases available at www.invest.bnpparibas.com.

ACQUISITIONS AND PARTNERSHIPS

No significant event has occurred since the Amendment to Universal registration document as at 30 June 2019 issued on 31 October 2019, that should be mentioned in this section.

3.6 Outlook

2020 OBJECTIVES

According to International Monetary Fund forecasts, economic growth is well-oriented for 2020 in the eurozone and in emerging markets, with a slight slowdown expected in the United States.

The adjustment of monetary policies in the summer of 2019 led to a more unfavourable interest rate environment than anticipated at the beginning of 2019. Interest-bearing products of the network banks of the Eurozone are thus impacted.

In this context, on the strength of its diversified revenue model, the Group anticipates to continue its growth.

STRONG BUSINESS DRIVE AND GROWTH: FULL CONTRIBUTION OF THE DIVERSIFIED AND INTEGRATED MODEL

The contribution of the Group's diversified model, the business drive, the strengthening of the franchises of the businesses, and also the increasing collaboration between the businesses and the full contribution of the transformation plan should fully support the Group's capacity to generate growth in this environment.

Domestic Markets anticipates a continuation in the acceleration of its business drive and the development of revenues, leveraging its leading positions in the specialised businesses and on corporate clients and Private Banking client segments with the strength of the integrated model. The division will continue to undertake the development of innovative digital offerings to acquire new customers and support evolving usages. Domestic Markets' revenues in 2020 are nonetheless expected to decrease moderately due to the impact of the persistently low interest rate environment in the networks partially offset by a rise in business and strong growth in the specialised businesses. The operating division will pursue its efforts to reduce operating expenses in the networks while supporting growth in the specialised businesses, and should generate a neutral jaws effect.

International Financial Services should continue the intensification of business growth based on its best in class offerings, its platforms, partnerships and distribution networks. It will pursue the selective growth of Retail Banking outside the eurozone and intensify the contribution of cooperation with the Group within the integrated model. IFS confirms its role as a growth engine for the Group with revenue expected to grow on the back of the business drive in all the IFS businesses and the development of partnerships. Supporting the increased business, the operating division should benefit from the full contribution of the levers of the transformation plan generating a positive jaws effect.

CIB is expected to consolidate its leading position in Europe on corporates with the intensification of the country development plans and the success of Capital Markets. It will continue reinforcing the institutional franchise with the integration of Deutsche Bank's Prime Brokerage platforms. Finally, CIB will capitalise on its global presence with targeted initiatives in Asia-Pacific (China, etc.) and the Americas (Brazil, Mexico, etc.) and will continue to develop cooperation with the other businesses of the

Group. Buoyed by these initiatives, the division is anticipating continued revenue growth sustained by new market share gains. While supporting business growth, the effect of cost saving measures should enable the division to generate a positive jaws effect.

TRANSFORMATION PLAN: A CONCRETE TRANSFORMATION GENERATING COST SAVINGS

The exceptional transformation costs under the 2020 plan totalled EUR 2.7 billion in three years. There will be no transformation costs in 2020, which will enable to reduce spending by EUR 0.7 billion in 2020 compared to 2019.

The recurring savings generated by the plan at the end of 2019 totalled EUR 1.8 billion in line with the objectives. The Group expects to generate an additional EUR 1.5 billion in additional recurring savings in 2020, thereby attaining the target of EUR 3.3 billion in cumulative recurring cost savings.

2020 EXCEPTIONAL ITEMS

The ramp-up of remote work and flex office makes it possible to adjust the property portfolio. It is thus expected that the sales of buildings by the Group will generate, in 2020, c. EUR 500 million in real estate capital gains.

On another note, in 2020, the Group envisions exceptional costs up EUR 200 million for the reinforcement of the information system as well as EUR 100 million for restructuring measures and 100 million for adaptation measures – early departure plans.

A POLICY OF ENGAGEMENT IN SOCIETY WITH THE AMBITION TO BE A LEADER IN SUSTAINABLE FINANCE

The Group has an ambitious Corporate Social Responsibility (CSR) policy and is committed to making a positive impact on society with concrete achievements. At the end of 2019, BNP Paribas reaffirmed its ambition to be a global leader in sustainable finance.

The Group is taking strong positions, as a founding member of the United Nations Principles for Responsible Banking, which commits it to align its strategy with the Paris Agreement and the Sustainable Development Goals (SDGs). Its objective in 2020 is to provide EUR 185 billion in financing to sectors contributing to the SDGs. It also promotes a more inclusive economy and business models for society.

It is accompanying the acceleration of the energy and environmental transition by making the commitment to support the preservation of the ocean, which includes EUR 1 billion to finance the ecological transition of ships by 2025, by taking the decision to reduce to nil its outstanding loans to companies related to thermal coal by 2030 in the European Union and 2040 in the rest of the world, and by raising its target of supporting renewable energy development by EUR 18 billion by 2021. The Group stopped financing companies whose principal business activity is related to the unconventional oil & gas sector and stopped financing of new coal projects since 2017.

The Group is also a very significant tax payer with a total amount of taxes and levies of EUR 5.9 billion paid in 2019, including EUR 2.5 billion in France.

CAPITAL

The Group's capital generation is regular and solid. Between 2014 and 2019, average growth of the common equity Tier 1 ratio was 35 basis points a year on average despite the impacts of the change in accounting standards, in particular in 2018 and 2019.

The target announced in 2017 to reach a 12% common equity Tier 1 ratio by the end of 2020 was already achieved in 2019. At 12.1% as at 31 December 2019, the Group's common equity Tier 1 is thus well above the requests notified by the SREP.

The finalisation of Basel 3 is in the process of being transposed in European Union law. After estimates of the European Banking Authority regarding the impact on capital requirements of banks, the European authorities reminded that this transposition is not expected to significantly increase these requirements for the banking industry taken as a whole. To this end, it is very probable that the exemptions decided during the vote of the CRD5 will be maintained. With this assumption and, to the extent necessary, by taking management actions, BNP Paribas deems that it will limit to 10% the inflation of its risk-weighted assets as a result of this transposition.

This inflation is assumed to be at least partly offset by expected adjustments by the supervisor (European Central Bank (S.S.M.)) with respect to Pillar 2: the application of article 104a of CRD5 should authorise the partial coverage of P2R by hybrid securities (AT1 and T2) and no longer by common equity Tier 1. The requests of Pillar 2 themselves, based on the supervisory process and in particular stress tests, could be recalibrated. As a reminder, BNP Paribas is one of the banks whose CET1 ratio is the least affected by the stress tests.

It therefore appears that with a CET1 ratio well above current requests as notified and a regular and solid capital generation, BNP Paribas is favourably positioned to face the finalization of Basel 3.

2020 OBJECTIVES SUMMARY

In 2020, the Group anticipates continuing to grow business in all the operating divisions, by leveraging a strong business drive and the contribution of the diversified and integrated model.

The Group will be able to leverage an ever more efficient and more digital operating model serving customers and employees.

The reinforcement of the franchises within the integrated model should continue, in particular for CIB with the ongoing development of its businesses and the strengthening of its European leadership.

The Group forecasts to benefit from the 2020 transformation plan and cost saving measures that should enable a decrease in absolute value of the operating expenses and a positive jaws effect.

The Group should continue to reinforce its leadership in sustainable finance and pursue an ambitious policy of engagement in civil society.

On this basis, the return on tangible equity (ROTE) is expected to stand at 10% with a 50% dividend pay-out ratio in cash[1].

BNP Paribas is likely to continue to confirm the strength of its model and its long-term capacity to create value in fast-changing economic, technological, regulatory, societal and environmental climates.

TREND INFORMATION

Trend information (Macroeconomic environment and Laws and regulations applicable to financial institutions) is described in the Top and emerging risks sub-section, in the Risks and capital adequacy chapter.

3.7 Financial structure

The Group has a very solid balance sheet.

The common equity Tier 1 ratio came in at 12.1% as at 31 December 2019, up 40 basis points from 1 January 2019 (down itself by 10 basis points compared to 31 December 2018 due to the impact of the new IFRS 16 accounting standard). The 40 basis point increase primarily broke down between: the 2019 net income excluding exceptional non-operating items and after taking into account a 50% pay-out ratio (+60 bps), the increase in risk-weighted assets at constant change net of the impact of securitisations (-40 bps), the net impact of the sales and acquisitions (SBI Life, the deconsolidation of the residual stake in this subsidiary and the impact of the agreement on Deutsche Bank's Prime Brokerage) as well as the partial impairment of BancWest's goodwill (+20 bps). The impact of other effects, including the change effect, on the ratio was on the whole limited.

The leverage ratio[2] stood at 4.6% as at 31 December 2019.

The immediately available liquidity reserves totalled EUR 309 billion, which is equivalent to more than one year of room to manoeuvre in terms of wholesale funding.

The evolution of these ratios illustrates the Group's ability to continuously adapt to regulatory changes and its exceptionally solid balance sheet.

(1) Subject to shareholder approval at the Annual General Meeting.

(2) Calculated according to the delegated act of the European Commission dated 10 October 2014.

3.8 Alternative Performance Measures (APM) – Article 223-1 of the AMF's General regulation

Alternative Performance Measures	Definition	Reason for use
Operating division profit and loss account aggregates (revenues, operating expenses, gross operating income, operating income, pre-tax income)	Sum of Domestic Markets' profit and loss account aggregates (with Domestic Markets' profit and loss account aggregates, including 2/3 of Private Banking in France, Italy, Belgium and Luxembourg), IFS and CIB BNP Paribas Group profit and loss account aggregates = Operating division profit and loss account aggregates + Corporate centre profit and loss account aggregates Reconciliation with Group profit and loss account aggregates is provided in the table "Core business results"	Representative measure of the BNP Paribas Group's operating performance
Profit and loss account aggregates, excluding PEL/CEL effect (revenues, gross operating income, operating income, pre-tax income)	Profit and loss account aggregate, excluding PEL/CEL effect Reconciliation with Group profit and loss account aggregates is provided in the table below	Representative measure of the aggregates of the period excluding changes in the provision that accounts for the risk generated by PEL and CEL accounts during their lifetime
Profit and loss account aggregates of Retail Banking activity with 100% of Private Banking	Profit and loss account aggregate of a Retail Banking activity including the whole profit and loss account of Private Banking Reconciliation with Group profit and loss account aggregates is provided in the table below	Representative measure of the performance of Retail Banking activity including the total performance of Private Banking before sharing the profit & loss account with the Wealth Management business, Private Banking being under a joint responsibility of Retail Banking (2/3) and Wealth Management business (1/3)
Cost/income ratio	Costs to income ratio	Measure of operational efficiency in the banking sector
Cost of risk/Customer loans at the beginning of the period (in basis points)	Cost of risk (in €m) divided by customer loans at the beginning of the period Details of the calculation are provided in the tables below	Measure of the risk level by business in percentage of the volume of outstanding loans
Doubtful loans' coverage ratio	Relationship between stage 3 provisions and impaired outstandings (stage 3), balance sheet and off-balance sheet, netted for collateral received, for customer and credit institutions, including liabilities at amortised cost and debt securities at fair value through equity (excluding insurance business)	Measure of provisioning for doubtful loans
Net income Group share excluding exceptional items	Net income attributable to equity holders excluding exceptional items Details of exceptional items are provided in the tables hereafter	Measure of BNP Paribas Group's net income excluding non-recurring items of a significant amount or items that do not reflect the underlying operating performance, notably transformation and restructuring costs.
Return on Equity (ROE)	Details of the ROE calculation are provided in the tables hereafter	Measure of the BNP Paribas Group's return on equity
Return on Tangible Equity (ROTE)	Details of the ROTE calculation are provided in the tables hereafter.	Measure of the BNP Paribas Group's return on tangible equity

RECONCILIATION OF PROFIT & LOSS WITH THE ALTERNATIVE PERFORMANCE MEASURES

2019 - Results by Core businesses

€m		Domestic Markets	International Financial Services	CIB	Operating Divisions	Corporate Centre	Group
Revenues		**15,262**	**17,183**	**12,080**	**44,526**	**71**	**44,597**
	% Change 2018	+0.9%	+6.9%	+11.6%	+5.9%	(85.1)%	+4.9%
Operating Expenses and Dep.		(10,439)	(10,507)	(8,663)	(29,609)	(1,728)	(31,337)
	% Change 2018	+0.4%	+4.5%	+6.1%	+3.5%	(12.0)%	+2.5%
Gross Operating Income		**4,824**	**6,676**	**3,417**	**14,917**	**(1,657)**	**13,260**
	% Change 2018	+2.0%	+10.9%	+28.2%	+11.2%	+11.5%	+11.1%
Cost of Risk		(1,016)	(1,911)	(218)	(3,145)	(58)	(3,203)
	% Change 2018	(2.7)%	+22.0%	n.s.	+18.5%	(46.8)%	+15.9%
Operating Income		**3,807**	**4,765**	**3,200**	**11,772**	**(1,715)**	**10,057**
	% Change 2018	+3.3%	+6.9%	+22.0%	+9.4%	+7.5%	+9.7%
Share of Earnings of Equity-Method Entities		1	488	16	505	81	586
Other Non Operating Items		1	(27)	(9)	(35)	786	751
Pre-Tax Income		**3,810**	**5,226**	**3,207**	**12,243**	**(849)**	**11,394**
	% Change 2018	+3.4%	+4.5%	+19.6%	+7.7%	(26.8)%	+11.6%
Corporate Income Tax							(2,811)
Net Income Attributable to Minority Interests							(410)
Net Income Attributable to Equity Holders							**8,173**

Reconciliation with profit and loss account aggregates of Retail Banking activity, excluding PEL/CEL effect and with 100% Private Banking

€m	2019	2018
Retail Banking & Services Excl. PEL/CEL		
Revenues	**32,433**	**31,188**
Operating Expenses and Dep.	(20,946)	(20,455)
Gross Operating Income	**11,488**	**10,732**
Cost of Risk	(2,927)	(2,611)
Operating Income	**8,561**	**8,122**
Share of Earnings of Equity-Method Entities	489	486
Other Non Operating Items	(26)	58
Pre-Tax Income	**9,024**	**8,665**
Allocated Equity *(€bn, year to date)*	54.9	52.5

€m	2019	2018
Retail Banking & Services		
Revenues	**32,445**	**31,208**
Operating Expenses and Dep.	(20,946)	(20,455)
Gross Operating Income	11,499	10,753
Cost of Risk	(2,927)	(2,611)
Operating Income	**8,573**	**8,142**
Share of Earnings of Equity-Method Entities	489	486
Other Non Operating Items	(26)	58
Pre-Tax Income	**9,036**	**8,686**
Allocated Equity *(€bn, year to date)*	54.9	52.5

€m	2019	2018
Domestic Markets (including 100% of PB in France, Italy, Belgium and Luxembourg)(1) Excluding PEL/CEL Effects		
Revenues	**15,814**	**15,683**
Operating Expenses and Dep.	(10,741)	(10,707)
Gross Operating Income	**5,073**	**4,977**
Cost of Risk	(1,021)	(1,046)
Operating Income	**4,052**	**3,930**
Share of Earnings of Equity-Method Entities	1	(3)
Other Non Operating Items	1	0
Pre-Tax Income	**4,054**	**3,927**
Income Attributable to Wealth and Asset Management	(256)	(264)
Pre-Tax Income of Domestic Markets	**3,798**	**3,663**
Allocated Equity *(€bn, year to date)*	25.7	25.2

(1) Including 100% of Private Banking for the Revenues to Pre-tax income items.

€m	2019	2018
Domestic Markets (including 2/3 of PB in France, Italy, Belgium and Luxembourg)		
Revenues	**15,262**	**15,132**
Operating Expenses and Dep.	(10,439)	(10,401)
Gross Operating Income	**4,824**	**4,731**
Cost of Risk	(1,016)	(1,045)
Operating Income	**3,807**	**3,686**
Share of Earnings of Equity-Method Entities	1	(3)
Other Non Operating Items	1	0
Pre-Tax Income	**3,810**	**3,683**
Allocated Equity *(€bn, year to date)*	25.7	25.2

€m	2019	2018
French Retail Banking (including 100% of Private Banking in France)[(1)]		
Revenues	**6,340**	**6,331**
Incl. Net Interest Income	*3,603*	*3,568*
Incl. Commissions	*2,737*	*2,763*
Operating Expenses and Dep.	(4,602)	(4,609)
Gross Operating Income	**1,738**	**1,722**
Cost of Risk	(329)	(288)
Operating Income	**1,409**	**1,434**
Non Operating Items	7	(1)
Pre-Tax Income	**1,416**	**1,432**
Income Attributable to Wealth and Asset Management	(143)	(148)
Pre-Tax Income of BDDF	**1,273**	**1,284**
Allocated Equity *(€bn, year to date)*	10.1	9.6

(1) Including 100% of Private Banking for the Revenues to Pre-tax income items.

€m	2019	2018
French Retail Banking (including 100% of Private Banking in France)[(1)] Excluding PEL/CEL Effects		
Revenues	**6,328**	**6,311**
Incl. Net Interest Income	*3,591*	*3,548*
Incl. Commissions	*2,737*	*2,763*
Operating Expenses and Dep.	(4,602)	(4,609)
Gross Operating Income	**1,726**	**1,701**
Cost of Risk	(329)	(288)
Operating Income	**1,397**	**1,413**
Non Operating Items	7	(1)
Pre-Tax Income	**1,404**	**1,412**
Income Attributable to Wealth and Asset Management	(143)	(148)
Pre-Tax Income of BDDF	**1,261**	**1,263**
Allocated Equity *(€bn, year to date)*	10.1	9.6

(1) Including 100% of Private Banking for the Revenues to Pre-tax income items.

€m	2019	2018
French Retail Banking (including 2/3 of Private Banking in France)		
Revenues	**6,050**	**6,035**
Operating Expenses and Dep.	(4,461)	(4,463)
Gross Operating Income	**1,590**	**1,571**
Cost of Risk	(324)	(286)
Operating Income	**1,266**	**1,285**
Non Operating Items	7	(1)
Pre-Tax Income	**1,273**	**1,284**
Allocated Equity *(€bn, year to date)*	10.1	9.6

€m	2019	2018
PEL-CEL Effects(1)	**12**	**20**

(1) *Reminder on PEL/CEL provision: this provision, accounted in the FRB's revenues, takes into account the risk generated by Plans Épargne Logement (PEL) and Comptes Épargne Logement (CEL) during their whole lifetime.*

€m	2019	2018
BNL banca commerciale (Including 100% of Private Banking in Italy)(1)		
Revenues	**2,778**	**2,792**
Operating Expenses and Dep.	(1,800)	(1,797)
Gross Operating Income	**978**	**995**
Cost of Risk	(490)	(592)
Operating Income	**488**	**402**
Non Operating Items	(5)	(3)
Pre-Tax Income	**483**	**399**
Income Attributable to Wealth and Asset Management	(41)	(43)
Pre-Tax Income of BNL bc	**443**	**356**
Allocated Equity *(€bn, year to date)*	5.3	5.5

(1) *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

€m	2019	2018
BNL banca commerciale (Including 2/3 of Private Banking in Italy)		
Revenues	**2,690**	**2,704**
Operating Expenses and Dep.	(1,753)	(1,752)
Gross Operating Income	**938**	**952**
Cost of Risk	(490)	(593)
Operating Income	**447**	**359**
Non Operating Items	(5)	(3)
Pre-Tax Income	**443**	**356**
Allocated Equity *(€bn, year to date)*	5.3	5.5

€m	2019	2018
Belgian Retail Banking (Including 100% of Private Banking in Belgium)(1)		
Revenues	**3,524**	**3,595**
Operating Expenses and Dep.	(2,480)	(2,521)
Gross Operating Income	**1,044**	**1,074**
Cost of Risk	(55)	(43)
Operating Income	**989**	**1,031**
Share of Earnings of Equity-Method Entities	13	10
Other Non Operating Items	(3)	8
Pre-Tax Income	**999**	**1,049**
Income Attributable to Wealth and Asset Management	(70)	(70)
Pre-Tax Income of Belgian Retail Banking	**929**	**980**
Allocated Equity *(€bn, year to date)*	5.8	5.7

(1) *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

€m	2019	2018
Belgian Retail Banking (Including 2/3 of Private Banking in Belgium)		
Revenues	**3,353**	**3,422**
Operating Expenses and Dep.	(2,378)	(2,418)
Gross Operating Income	**975**	**1,004**
Cost of Risk	(56)	(42)
Operating Income	**919**	**961**
Share of Earnings of Equity-Method Entities	13	10
Other Non Operating Items	(3)	8
Pre-Tax Income	**929**	**980**
Allocated Equity *(€bn, year to date)*	5.8	5.7

€m	2019	2018
Other Domestic Markets Activities including Luxembourg (including 100% of Private Banking in Luxembourg)(1)		
Revenues	**3,184**	**2,986**
Operating Expenses and Dep.	(1,859)	(1,779)
Gross Operating Income	**1,325**	**1,207**
Cost of Risk	(146)	(123)
Operating Income	**1,178**	**1,084**
Share of Earnings of Equity-Method Entities	(12)	(12)
Other Non Operating Items	2	(5)
Pre-Tax Income	**1,168**	**1,067**
Income Attributable to Wealth and Asset Management	(3)	(3)
Pre-Tax Income of Other Domestic Markets	**1,165**	**1,064**
Allocated Equity *(€bn, year to date)*	4.5	4.4

(1) Including 100% of Private Banking for the Revenues to Pre-tax income items.

€m	2019	2018
Other Domestic Markets Activities including Luxembourg (including 2/3 of Private Banking in Luxembourg)		
Revenues	**3,169**	**2,972**
Operating Expenses and Dep.	(1,847)	(1,768)
Gross Operating Income	**1,322**	**1,204**
Cost of Risk	(146)	(123)
Operating Income	**1,175**	**1,081**
Share of Earnings of Equity-Method Entities	(12)	(12)
Other Non Operating Items	2	(5)
Pre-Tax Income	**1,165**	**1,064**
Allocated Equity *(€bn, year to date)*	4.5	4.4

€m	2019	2018
Europe-Mediterranean (Including 100% of Private Banking in Turkey)[(1)]		
Revenues	**2,699**	**2,358**
Operating Expenses and Dep.	(1,799)	(1,605)
Gross Operating Income	**900**	**753**
Cost of Risk	(399)	(308)
Operating Income	**502**	**445**
Share of Earnings of Equity-Method Entities	224	188
Other Non Operating Items	7	53
Pre-Tax Income	**733**	**686**
Income Attributable to Wealth and Asset Management	(4)	(3)
Pre-Tax Income of EM	**728**	**684**
Allocated Equity *(€bn, year to date)*	5.3	4.8

(1) Including 100% of Private Banking for the Revenues to Pre-tax income items.

€m	2019	2018
Europe-Mediterranean (Including 2/3 of Private Banking in Turkey)		
Revenues	**2,690**	**2,351**
Operating Expenses and Dep.	(1,794)	(1,600)
Gross Operating Income	**896**	**750**
Cost of Risk	(399)	(308)
Operating Income	**497**	**443**
Share of Earnings of Equity-Method Entities	224	188
Other Non Operating Items	7	53
Pre-Tax Income	**728**	**684**
Allocated Equity *(€bn, year to date)*	5.3	4.8

€m	2019	2018
BancWest (Including 100% of Private Banking in United States)[(1)]		
Revenues	**2,375**	**2,289**
Operating Expenses and Dep.	(1,712)	(1,682)
Gross Operating Income	**663**	**607**
Cost of Risk	(148)	(70)
Operating Income	**515**	**537**
Share of Earnings of Equity-Method Entities	0	0
Other Non Operating Items	(3)	2
Pre-Tax Income	**512**	**539**
Income Attributable to Wealth and Asset Management	(28)	(28)
NRBI	**484**	**512**
Allocated Equity *(€bn, year to date)*	5.4	4.9

(1) Including 100% of Private Banking for the Revenues to Pre-tax income items.

€m	2019	2018
BancWest (Including 2/3 of Private Banking in United States)		
Revenues	**2,309**	**2,226**
Operating Expenses and Dep.	-1,674	-1,647
Gross Operating Income	**635**	**579**
Cost of Risk	-148	-70
Operating Income	**487**	**510**
Non Operating Items	-3	2
Pre-Tax Income	**484**	**512**
Allocated Equity *(€bn, year to date)*	5.4	4.9

Reconciliation with the aggregate cost of risk on outstanding (cost of risk/customer loans at the beginning of the period, in annualised bp[1])

	2019	2018
Domestic Markets[1]		
Loan outstandings as of the beg. of the quarter *(€bn)*	414.0	401.3
Cost of risk *(€m)*	1,021	1,046
Cost of risk *(in annualised bp)*	25	26
FRB[1]		
Loan outstandings as of the beg. of the quarter *(€bn)*	190.4	185.2
Cost of risk *(€m)*	329	288
Cost of risk *(in annualised bp)*	17	16
BNL bc[1]		
Loan outstandings as of the beg. of the quarter *(€bn)*	77.2	78.6
Cost of risk *(€m)*	490	592
Cost of risk *(in annualised bp)*	64	75
BRB[1]		
Loan outstandings as of the beg. of the quarter *(€bn)*	113.0	106.4
Cost of risk *(€m)*	55	43
Cost of risk *(in annualised bp)*	5	4

(1) With Private Banking at 100%.

	2019	2018
BancWest[1]		
Loan outstandings as of the beg. of the quarter *(€bn)*	55.1	51.3
Cost of risk *(€m)*	148	70
Cost of risk *(in annualised bp)*	27	14
Europe-Mediterranean[1]		
Loan outstandings as of the beg. of the quarter *(€bn)*	40.7	37.7
Cost of risk *(€m)*	399	308
Cost of risk *(in annualised bp)*	98	82
Personal Finance		
Loan outstandings as of the beg. of the quarter *(€bn)*	93.5	84.3
Cost of risk *(€m)*	1,354	1,186
Cost of risk *(in annualised bp)*	145	141
CIB - Corporate Banking		
Loan outstandings as of the beg. of the quarter *(€bn)*	145.6	132.6
Cost of risk *(€m)*	223	31
Cost of risk *(in annualised bp)*	15	2
Group[2]		
Loan outstandings as of the beg. of the quarter *(€bn)*	827.1	788.4
Cost of risk *(€m)*	3,203	2,764
Cost of risk *(in annualised bp)*	39	35

(1) With Private Banking at 100%.
(2) Including cost of risk of market activities, International Financial Services and Corporate Centre.

METHODOLOGY – COMPARATIVE ANALYSIS AT CONSTANT SCOPE AND EXCHANGE RATES

The method used to determine the effect of changes in scope of consolidation depends on the type of transaction (acquisition, sale, etc.). The underlying purpose of the calculation is to facilitate period-on-period comparisons.

In case of acquired or created entity, the results of the new entity are eliminated from the constant scope results of current-year periods corresponding to the periods when the entity was not owned in the prior-year.

In case of divested entities, the entity's results are excluded symmetrically for the prior year for quarters when the entity was not owned.

In case of change of consolidation method, the policy is to use the lowest consolidation percentage over the two years (current and prior) for results of quarters adjusted on a like-for-like basis.

Comparative analysis at constant exchange rates are prepared by restating results for the prior-year quarter (reference quarter) at the current quarter exchange rate (analysed quarter). All of these calculations are performed by reference to the entity's reporting currency.

REMINDER

Net Banking Income: in this document, the terms "Net Banking Income" and "Revenues" are used interchangeably.

Operating expenses: sum of salary and employee benefit expenses, other operating expenses and depreciation, amortisation and impairment of property, plant and equipment. In the whole document, the terms operating expenses or costs can be used indifferently.

Operating divisions: they consist of 3 divisions:

- Domestic Markets including: French Retail Banking (FRB), BNL banca commerciale (BNL bc), Belgium Retail Banking (BRB), Other Domestic Markets activities including Arval, Leasing Solutions, Personal Investors, Nickel and Luxembourg Retail Banking (LRB);
- International Financial Services (IFS) including: Europe-Mediterranean, BancWest, Personal Finance, Insurance, Wealth & Asset Management (WAM) that includes Asset Management, Wealth Management and Real Estate Services;
- Corporate and Institutional Banking (CIB) including: Corporate Banking, Global Markets, Securities Services.
- Capital allocation: see page 115.

NET EARNINGS PER SHARE

In millions	31 December 2019	31 December 2018	31 December 2017	31 December 2016	31 December 2015
Average number of shares outstanding excluding Treasury shares	**1,248**	**1,248**	**1,246**	**1,244**	**1,243**
Net income attributable to equity holders	8,173	7,526	7,759	7,702	6,694
Remuneration net of tax of Undated Super Subordinated Notes	(414)	(367)	(286)	(357)	(282)
Exchange rate effect on reimbursed Undated Super Subordinated Notes	(14)	0	64	125	(27)
Net income attributable to equity holders, after remuneration and exchange rate effect on Undated Super Subordinated Notes	**7,745**	**7,159**	**7,537**	**7,470**	**6,385**
NET EARNINGS PER SHARE (EPS) *(IN EUROS)*	**6.21**	**5.73**	**6.05**	**6.00**	**5.14**

RETURN ON EQUITY

In millions of euros	31 December 2019	31 December 2018
Shareholders' Equity Group Share	**8,173**	**7,526**
Remuneration net of tax of Undated Super Subordinated Notes	(428)	(367)
Net income restated used for the calculation of ROE/ROTE	**7,745**	**7,159**
Average permanent shareholders' equity, not revaluated(1)	**90,770**	**87,257**
Return on Equity	**8.5%**	**8.2%**
Average tangible permanent shareholders' equity, not revaluated(2)	**78,801**	**74,901**
Return on Tangible Equity	**9.8%**	**9.6%**

(1) Average Permanent shareholders' equity: average of beginning of the year and end of the period (Permanent Shareholders' equity = Shareholders' equity attributable to shareholders - changes in assets and liabilities recognised directly in equity - Undated Super Subordinated Notes - remuneration net of tax payable to holders of Undated Super Subordinated Notes - proposed dividend distribution).

(2) Average Tangible permanent shareholders' equity: average of beginning of the year and end of the period (Tangible permanent shareholders' equity = permanent shareholders' equity - intangible assets - goodwill).

MAIN EXCEPTIONNAL ITEMS

	2019	2018
Operating expenses		
Restructuring costs(1) *(Corporate Centre)*	(311)	(129)
Transformation costs - 2020 Plan *(Corporate Centre)*	(744)	(1,106)
Additional adaptation measures - departure plans(2) *(Corporate Centre)*	(162)	
Total exceptional operating expenses	**(1,217)**	**(1,235)**
Other non operating items		
Capital gain on the sale of 16.8% of SBI Life and deconsolidation of the residual stake(3) *(Corporate Center)*	1,450	
Capital gain on the sale of a building *(Corporate Centre)*	101	
Goodwill impairments *(Corporate Centre)*	(818)	
Capital gain on the sale of 30.3% of First Hawaiian Bank *(Corporate Centre)*		286
Capital gain on the sale of a building *(Corporate Centre)*		101
Total exceptional other non operating items	**732**	**387**
TOTAL EXCEPTIONAL ITEMS (PRE-TAX)	**(485)**	**(848)**
TOTAL EXCEPTIONAL ITEMS (AFTER TAX)(4)	**(242)**	**(510)**

(1) Related in particular to the integration of Raiffeisen Bank Polska and the discontinuation or restructuring of certain businesses (in particular BNP Paribas Switzerland).

(2) Related in particular to BNL bc, Asset Management and BancWest.

(3) 5.2% residual stake in SBI Life.

(4) Group share.

4 CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019

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The consolidated financial statements of the BNP Paribas Group are presented for the years ended 2019 and 2018. In accordance with article 20.1 of Annex I of European Commission Regulation (EC) 809/2004, the consolidated financial statements for the year ended 2017 are provided in the Registration document filed with the Autorité des Marchés Financiers on 5 March 2019 under number D.19-0114.

4.1 Profit and loss account for the year ended 31 December 2019

In millions of euros	Notes	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Interest income	3.a	37,327	35,723
Interest expense	3.a	(16,200)	(14,661)
Commission income	3.b	13,265	12,925
Commission expense	3.b	(3,900)	(3,718)
Net gain on financial instruments at fair value through profit or loss	3.c	7,111	5,808
Net gain on financial instruments at fair value through equity	3.d	350	315
Net gain on derecognised financial assets at amortised cost		3	(5)
Net income from insurance activities	3.e	4,437	4,064
Income from other activities	3.f	13,502	12,324
Expense on other activities	3.f	(11,298)	(10,259)
REVENUES		**44,597**	**42,516**
Salary and employee benefit expense	7.a	(17,553)	(16,617)
Other operating expenses	3.g	(11,339)	(12,290)
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	5.n	(2,445)	(1,676)
GROSS OPERATING INCOME		**13,260**	**11,933**
Cost of risk	3.h	(3,203)	(2,764)
OPERATING INCOME		**10,057**	**9,169**
Share of earnings of equity-method entities	5.m	586	628
Net gain on non-current assets		1,569	358
Goodwill	5.o	(818)	53
PRE-TAX INCOME		**11,394**	**10,208**
Corporate income tax	3.i	(2,811)	(2,203)
NET INCOME		**8,583**	**8,005**
Net income attributable to minority interests		410	479
NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS		**8,173**	**7,526**
Basic earnings per share	8.a	6.21	5.73
Diluted earnings per share	8.a	6.21	5.73

4.2 Statement of net income and changes in assets and liabilities recognised directly in equity

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Net income for the period	**8,583**	**8,005**
Changes in assets and liabilities recognised directly in equity	**1,630**	**(1,315)**
Items that are or may be reclassified to profit or loss	**1,565**	**(1,404)**
Changes in exchange differences	530	(159)
Changes in fair value of financial assets at fair value through equity		
Changes in fair value recognised in equity	*283*	*(461)*
Changes in fair value reported in net income	*(191)*	*(110)*
Changes in fair value of investments of insurance activities		
Changes in fair value recognised in equity	*883*	*(530)*
Changes in fair value reported in net income	*(76)*	*(99)*
Changes in fair value of hedging instruments		
Changes in fair value recognised in equity	*494*	*(406)*
Changes in fair value reported in net income	*(125)*	*(7)*
Income tax	(391)	505
Changes in equity-method investments	158	(137)
Items that will not be reclassified to profit or loss	**65**	**89**
Changes in fair value of equity instruments designated as at fair value through equity	114	(148)
Debt remeasurement effect arising from BNP Paribas Group issuer risk	9	195
Remeasurement gains (losses) related to post-employment benefit plans	(28)	137
Income tax	(15)	(96)
Changes in equity-method investments	(15)	1
TOTAL	**10,213**	**6,690**
Attributable to equity shareholders	9,796	6,215
Attributable to minority interests	417	475

4.3 Balance sheet at 31 December 2019

In millions of euros	Notes	31 December 2019	31 December 2018
ASSETS			
Cash and balances at central banks		155,135	185,119
Financial instruments at fair value through profit or loss			
Securities	5.a	131,935	121,954
Loans and repurchase agreements	5.a	196,927	183,716
Derivative financial instruments	5.a	247,287	232,895
Derivatives used for hedging purposes	5.b	12,452	9,810
Financial assets at fair value through equity			
Debt securities	5.c	50,403	53,838
Equity securities	5.c	2,266	2,151
Financial assets at amortised cost			
Loans and advances to credit institutions	5.e	21,692	19,556
Loans and advances to customers	5.e	805,777	765,871
Debt securities	5.e	108,454	75,073
Remeasurement adjustment on interest-rate risk hedged portfolios		4,303	2,787
Financial investments of insurance activities	5.i	257,818	232,308
Current and deferred tax assets	5.k	6,813	7,220
Accrued income and other assets	5.l	113,535	103,346
Equity-method investments	5.m	5,952	5,772
Property, plant and equipment and investment property	5.n	32,295	26,652
Intangible assets	5.n	3,852	3,783
Goodwill	5.o	7,817	8,487
Non-current assets held for sale	8.c		498
TOTAL ASSETS		**2,164,713**	**2,040,836**
LIABILITIES			
Deposits from central banks		2,985	1,354
Financial instruments at fair value through profit or loss			
Securities	5.a	65,490	75,189
Deposits and repurchase agreements	5.a	215,093	204,039
Issued debt securities	5.a	63,758	54,908
Derivative financial instruments	5.a	237,885	225,804
Derivatives used for hedging purposes		14,116	11,677
Financial liabilities at amortised cost			
Deposits from credit institutions	5.g	84,566	78,915
Deposits from customers	5.g	834,667	796,548
Debt securities	5.h	157,578	151,451
Subordinated debt	5.h	20,003	17,627
Remeasurement adjustment on interest-rate risk hedged portfolios		3,989	2,470
Current and deferred tax liabilities	5.k	3,566	2,255
Accrued expenses and other liabilities	5.l	102,749	89,562
Technical reserves and other insurance liabilities	5.j	236,937	213,691
Provisions for contingencies and charges	5.p	9,486	9,620
TOTAL LIABILITIES		**2,052,868**	**1,935,110**
EQUITY			
Share capital, additional paid-in capital and retained earnings		*97,135*	*93,431*
Net income for the period attributable to shareholders		*8,173*	*7,526*
Total capital, retained earnings and net income for the period attributable to shareholders		**105,308**	**100,957**
Changes in assets and liabilities recognised directly in equity		*2,145*	*510*
Shareholders' equity		**107,453**	**101,467**
Minority interests	8.d	**4,392**	**4,259**
TOTAL EQUITY		**111,845**	**105,726**
TOTAL LIABILITIES AND EQUITY		**2,164,713**	**2,040,836**

4.4 Cash flow statement for the year ended 31 December 2019

In millions of euros	Notes	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Pre-tax income		**11,394**	**10,208**
Non-monetary items included in pre-tax net income and other adjustments		**13,413**	**9,713**
Net depreciation/amortisation expense on property, plant and equipment and intangible assets		6,108	5,144
Impairment of goodwill and other non-current assets		796	(133)
Net addition to provisions		11,071	10,210
Share of earnings of equity-method entities		(586)	(628)
Net (income) from investing activities		(1,585)	(660)
Net (income) from financing activities		(830)	(501)
Other movements		(1,561)	(3,719)
Net decrease in cash related to assets and liabilities generated by operating activities		**(75,644)**	**(20,439)**
Net decrease in cash related to transactions with customers and credit institutions		(14,723)	(1,104)
Net decrease in cash related to transactions involving other financial assets and liabilities		(51,042)	(13,276)
Net decrease in cash related to transactions involving non-financial assets and liabilities		(7,945)	(4,823)
Taxes paid		(1,934)	(1,236)
NET DECREASE IN CASH AND EQUIVALENTS GENERATED BY OPERATING ACTIVITIES		**(50,837)**	**(518)**
Net increase in cash related to acquisitions and disposals of consolidated entities		1,675	3,152
Net decrease related to property, plant and equipment and intangible assets		(1,998)	(1,827)
NET INCREASE (DECREASE) IN CASH AND EQUIVALENTS RELATED TO INVESTING ACTIVITIES		**(323)**	**1,325**
Decrease in cash and equivalents related to transactions with shareholders		(3,987)	(4,039)
Increase in cash and equivalents generated by other financing activities		24,128	9,865
NET INCREASE IN CASH AND EQUIVALENTS RELATED TO FINANCING ACTIVITIES		**20,141**	**5,826**
EFFECT OF MOVEMENT IN EXCHANGE RATES ON CASH AND EQUIVALENTS		**714**	**1,529**
NON-MONETARY IMPACTS FROM NON-CURRENT ASSETS HELD FOR SALE		**-**	**(700)**
NET INCREASE (DECREASE) IN CASH AND EQUIVALENTS		**(30,305)**	**7,462**
Balance of cash and equivalent accounts at the start of the period		**182,523**	**175,061**
Cash and amounts due from central banks		185,134	178,446
Due to central banks		(1,354)	(1,471)
On demand deposits with credit institutions		8,813	8,063
On demand loans from credit institutions	5.g	(10,571)	(9,906)
Deduction of receivables and accrued interest on cash and equivalents		501	(71)
Balance of cash and equivalent accounts at the end of the period		**152,218**	**182,523**
Cash and amounts due from central banks		155,151	185,134
Due to central banks		(2,985)	(1,354)
On demand deposits with credit institutions		8,972	8,813
On demand loans from credit institutions	5.g	(9,072)	(10,571)
Deduction of receivables and accrued interest on cash and equivalents		152	501
NET INCREASE (DECREASE) IN CASH AND EQUIVALENTS		**(30,305)**	**7,462**

4.5 Statement of changes in shareholders' equity

	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	
In millions of euros	Share capital and additional paid-in-capital	Undated Super Subordinated Notes	Non-distributed reserves	Total	Financial assets designated as at fair value through equity	Own-credit valuation adjustment of debt securities designated as at fair value through profit or loss
Capital and retained earnings at 1 January 2018	**27,051**	**8,172**	**62,416**	**97,639**	**561**	**(323)**
Appropriation of net income for 2017			**(3,772)**	**(3,772)**		
Increases in capital and issues	49	660	(2)	707		
Reduction or redemption of capital		(600)		(600)		
Movements in own equity instruments	(64)	(2)	(142)	(208)		
Share-based payment plans			2	2		
Remuneration on preferred shares and undated super subordinated notes			(356)	(356)		
Impact of internal transactions on minority shareholders			6	6		
Movements in consolidation scope impacting minority shareholders *(note 8.d)*			(37)	(37)		
Acquisitions of additional interests or partial sales of interests *(note 8.d)*			71	71		
Change in commitments to repurchase minority shareholders interests			(6)	(6)		
Other movements			(8)	(8)		
Realised gains or losses reclassified to retained earnings			(7)	(7)		7
Changes in assets and liabilities recognised directly in equity				-	(158)	134
Net income for 2018			**7,526**	**7,526**		
Interim dividend payments				-		
Capital and retained earnings at 31 December 2018	**27,036**	**8,230**	**65,691**	**100,957**	**403**	**(182)**
Effect of IFRS 16 first time adoption *(note 2.)*			(141)	(141)		
Capital and retained earnings at 1 January 2019	**27,036**	**8,230**	**65,550**	**100,816**	**403**	**(182)**
Appropriation of net income for 2018			**(3,772)**	**(3,772)**		
Increases in capital and issues		1,512	(2)	1,510		
Reduction or redemption of capital		(1,069)	(14)	(1,083)		
Movements in own equity instruments	34	16	36	86		
Share-based payment plans				-		
Remuneration on preferred shares and undated super subordinated notes			(401)	(401)		
Impact of internal transactions on minority shareholders *(note 8.d)*			(1)	(1)		
Acquisitions of additional interests or partial sales of interests *(note 8.d)*			18	18		
Change in commitments to repurchase minority shareholders' interests			(7)	(7)		
Other movements			(19)	(19)		
Realised gains or losses reclassified to retained earnings			(12)	(12)		12
Changes in assets and liabilities recognised directly in equity				-	108	7
Net income for 2019			**8,173**	**8,173**		
Capital and retained earnings at 31 December 2019	**27,070**	**8,689**	**69,549**	**105,308**	**511**	**(163)**

between 1 January 2018 and 31 December 2019

Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss		Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss							
Remeasurement gains (losses) related to post-employment benefits plans	Total	Exchange differences	Financial assets at fair value through equity	Financial investments of insurance activities	Derivatives used for hedging purposes	Total	Total shareholders' equity	Minority interests (note 8.d)	Total equity
68	306	(2,192)	589	1,947	1,137	1,481	99,426	5,126	104,552
	-					-	(3,772)	(160)	(3,932)
	-					-	707	4	711
	-					-	(600)		(600)
	-					-	(208)		(208)
	-					-	2		2
	-					-	(356)	(2)	(358)
	-					-	6	(6)	-
37	37					-	-	(1,299)	(1,299)
9	9	(29)	10			(19)	61	307	368
	-					-	(6)	(165)	(171)
	-					-	(8)	11	3
	7					-	-		-
96	72	(252)	(398)	(418)	(315)	(1,383)	(1,311)	(4)	(1,315)
	-					-	7,526	479	8,005
	-					-	-	(32)	(32)
210	431	(2,473)	201	1,529	822	79	101,467	4,259	105,726
	-					-	(141)	(5)	(146)
210	431	(2,473)	201	1,529	822	79	101,326	4,254	105,580
	-					-	(3,772)	(227)	(3,999)
	-					-	1,510	10	1,520
	-					-	(1,083)		(1,083)
	-					-	86		86
	-					-	-		-
	-					-	(401)	(1)	(402)
	-					-	(1)	1	-
	-					-	18	1	19
	-					-	(7)	(64)	(71)
	-					-	(19)	1	(18)
	12					-	-		-
(50)	65	571	40	709	238	1,558	1,623	7	1,630
	-					-	8,173	410	8,583
160	508	(1,902)	241	2,238	1,060	1,637	107,453	4,392	111,845

4.6 Notes to the financial statements prepared in accordance with IFRS as adopted by the European Union

Note 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES APPLIED BY THE GROUP

1.a ACCOUNTING STANDARDS

1.a.1 Applicable accounting standards

The consolidated financial statements of the BNP Paribas Group have been prepared in accordance with international accounting standards (International Financial Reporting Standards – IFRS), as adopted for use in the European Union[(1)]. Accordingly, certain provisions of IAS 39 on hedge accounting have been excluded, and certain recent texts have not yet undergone the approval process.

Information on the nature and extent of risks relating to financial instruments as required by IFRS 7 "Financial Instruments: Disclosures" and to insurance contracts as required by IFRS 4 "Insurance Contracts", along with information on regulatory capital required by IAS 1 "Presentation of financial statements" are presented in chapter 5 of the Universal registration document. This information, which is an integral part of the notes to the BNP Paribas Group's consolidated financial statements, is covered by the opinion of the Statutory Auditors concerning the consolidated financial statements, and is identified in the Annual Report by the word "Audited".

- Since 1 January 2019, the Group applies IFRS 16 "Leases", adopted by the European Union on 31 October 2017.

  IFRS 16 supersedes IAS 17 "Leases" and the interpretations relating to the accounting of such contracts. It defines new accounting principles applicable to lease contracts for the lessee, that rely on both the identification of an asset and the control of the right to use the identified asset by the lessee.

  The standard requires the recognition in the balance-sheet of the lessee of all lease contracts, in the form of a right-of-use on the leased asset presented under fixed assets, along with the recognition of a financial liability for the rent and other payments to be made over the leasing period. The right-of-use assets are amortised on a straight-line basis and the financial liabilities are amortised on an actuarial basis over the lease period. The main change induced by this new standard is related to contracts which, under IAS 17, met the definition of operating leases, and as such, did not require recognition of the leased assets in the balance sheet.

  The main impact in the profit and loss account is the replacement of rental expenses previously accounted for on a linear basis in operating expenses by additional interest expenses in Net Banking Income in relation with lease liabilities, and the recognition of additional amortizing expenses in relation with rights-of-use.

  Detailed accounting principles applicable by the Group as lessee are presented in note 1.h.2. The detail of the impacts of the first application of the standard is presented in note 2.

  From the lessor's point of view, the impact is limited, as the requirements of IFRS 16 remain mostly unchanged from IAS 17.

  The IFRS Interpretation Committee has been requested with a question concerning the determination of a lease term of two types of contracts cancellable or renewable:

  - contracts without no particular contractual term, cancellable at any time with notice period by either the lessee and the lessor without penalty to paid,
  - contracts concluded for an initial short period (normally 12 months), renewable indefinitely by tacit renewal for the same period, unless the lessor and the lessee gives notice to the contrary;

  At the end of its meeting of 26 November last, IFRIC confirmed its reading of IFRS 16 by stating that the enforceability of the two types of contract may extend beyond the notice period if either party has an economic incentive not negligible to not terminate the lease. IFRIC also confirmed that if an entity expects to use non-removable leasehold improvement after the date on which the contract can be terminated, the existence of such improvements indicates that the entity may incur a significant economic penalty in the event of termination and in this case the contract becomes enforceable beyond the date of termination.

  The application of this decision should have a non significant impact for the Group and will be applied in 2020.

- The Group has applied IFRIC 23 "Uncertainty over income tax treatment" for the preparation of its consolidated financial statements for the financial year 2019. The consequence of this standard is the reclassification in current and deferred tax liabilities of provisions for uncertainties relating to income tax.
- Since 1st January 2018, the Group has anticipated the application of amendments to IFRS 9: "Prepayment Features with Negative Compensation."

(1) The full set of standards adopted for use in the European Union can be found on the website of the European Commission at: https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting_en

- In September 2019, the IASB issued amendments to IAS 39 and IFRS 7, modifying specific hedge accounting requirements to allow hedge accounting to continue for hedges affected by the reform during the period of uncertainty before the hedged items or hedging instruments are amended to incorporate the reformed benchmark rates. These amendments, endorsed by the European Commission on 15 January 2020 are mandatorily applicable for annual reporting periods beginning on or after 1 January 2020, however early application is possible and is the option chosen by the Group, for its existing hedge accounting relationships to continue.

  Fair value and cash flow hedge relationships documented by the Group are in regard of the benchmark rates in the scope of the reform, mainly the Eonia, Euribor, and Libor rates. For these hedging relationships, hedged items and hedging derivatives will progressively be amended to incorporate the new benchmark rates. The Group considers that the amendments to IAS 39 and IFRS 7 are applicable when there is uncertainty about future cash flows. It is the case when the contractual terms of the hedged instruments or of the hedging instruments have not yet been amended (for instance with the inclusion of a fallback clause), or, if they were amended, if the terms and date of the transition to the new benchmark rates have not been clearly specified.

  The Group put in place a Group-wide IBORs transition program mid-2018 involving all BNP Paribas business lines and functions.

  This program is in charge of framing and implementing the transition from legacy IBOR rates (mostly LIBORs and EONIA) to the new risk-free rates in all relevant jurisdictions and currencies, whilst managing the various risks resulting from this transition, and meeting deadlines set by relevant authorities. Group representatives contribute to most industry working groups established in conjunction with the various central banks and financial regulators.

  The notional amount of the hedging instruments involved in the hedging relationships impacted by the interest rate benchmark reform is the sum of notional amounts disclosed in note 5b "Derivatives used for hedging purposes".

The introduction of other standards, amendments and interpretations which are mandatory as of 1 January 2019 did not have an effect on the 2019 financial statements.

Except for the IFRS 9, IAS 39 and IFRS 7 amendments mentioned above, the Group did not anticipate the application of the new standards, amendments, and interpretations adopted by the European Union, when the application in 2019 was optional.

1.a.2 New major accounting standards, published but not yet applicable

IFRS 17 "Insurance Contracts", issued in May 2017, will replace IFRS 4 "Insurance Contracts" and will become mandatory for annual periods beginning on or after 1 January 2021[1], after its adoption by the European Union for application in Europe.

The analysis of the standard and the identification of its effects are going on.

1.b CONSOLIDATION

1.b.1 Scope of consolidation

The consolidated financial statements of BNP Paribas include entities that are controlled by the Group, jointly controlled, and under significant influence, with the exception of those entities whose consolidation is regarded as immaterial to the Group. Companies that hold shares in consolidated companies are also consolidated.

Subsidiaries are consolidated from the date on which the Group obtains effective control. Entities under temporary control are included in the consolidated financial statements until the date of disposal.

1.b.2 Consolidation methods

Exclusive control

Controlled enterprises are fully consolidated. The Group controls a subsidiary when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

For entities governed by voting rights, the Group generally controls the entity if it holds, directly or indirectly, the majority of the voting rights (and if there are no contractual provisions that alter the power of these voting rights) or if the power to direct the relevant activities of the entity is conferred on it by contractual agreements.

Structured entities are entities established so that they are not governed by voting rights, for instance when those voting rights relate to administrative tasks only, whereas the relevant activities are directed by means of contractual arrangements. They often have the following features or attributes: restricted activities, a narrow and well-defined objective and insufficient equity to permit them to finance their activities without subordinated financial support.

For these entities, the analysis of control shall consider the purpose and design of the entity, the risks to which the entity is designed to be exposed and to what extent the Group absorbs the related variability. The assessment of control shall consider all facts and circumstances able to determine the Group's practical ability to make decisions that could significantly affect its returns, even if such decisions are contingent on uncertain future events or circumstances.

In assessing whether it has power, the Group considers only substantive rights which it holds or which are held by third parties. For a right to be substantive, the holder must have the practical ability to exercise that right when decisions about the relevant activities of the entity need to be made.

Control shall be reassessed if facts and circumstances indicate that there are changes to one or more of the elements of control.

(1) On 26 June 2019, the IASB published an exposure draft "Amendments to IFRS 17" including in particular the deferral of the mandatory initial application of IFRS 17 to 1 January 2022.

Where the Group contractually holds the decision-making power, for instance where the Group acts as fund manager, it shall determine whether it is acting as agent or principal. Indeed, when associated with a certain level of exposure to the variability of returns, this decision-making power may indicate that the Group is acting on its own account and that it thus has control over those entities.

Minority interests are presented separately in the consolidated profit and loss account and balance sheet within consolidated equity. The calculation of minority interests takes into account the outstanding cumulative preferred shares classified as equity instruments issued by subsidiaries, when such shares are held outside the Group.

As regards fully consolidated funds, units held by third-party investors are recognised as debts at fair value through profit or loss, inasmuch as they are redeemable at fair value at the subscriber's initiative.

For transactions resulting in a loss of control, any equity interest retained by the Group is remeasured at its fair value through profit or loss.

Joint control

Where the Group carries out an activity with one or more partners, sharing control by virtue of a contractual agreement which requires unanimous consent on relevant activities (those that significantly affect the entity's returns), the Group exercises joint control over the activity. Where the jointly controlled activity is structured through a separate vehicle in which the partners have rights to the net assets, this joint venture is accounted for using the equity method. Where the jointly controlled activity is not structured through a separate vehicle or where the partners have rights to the assets and obligations for the liabilities of the jointly controlled activity, the Group accounts for its share of the assets, liabilities, revenues and expenses in accordance with the applicable IFRSs.

Significant influence

Companies over which the Group exercises significant influence or associates are accounted for by the equity method. Significant influence is the power to participate in the financial and operating policy decisions of a company without exercising control. Significant influence is presumed to exist when the Group holds, directly or indirectly, 20% or more of the voting rights of a company. Interests of less than 20% can be included in the consolidation scope if the Group effectively exercises significant influence. This is the case for example for entities developed in partnership with other associates, where the BNP Paribas Group participates in strategic decisions of the enterprise through representation on the Board of directors or equivalent governing body, or exercises influence over the enterprise's operational management by supplying management systems or senior managers, or provides technical assistance to support the enterprise's development.

Changes in the net assets of associates (companies accounted for under the equity method) are recognised on the assets side of the balance sheet under "Investments in equity-method entities" and in the relevant component of shareholders' equity. Goodwill recorded on associates is also included under "Equity-method investments".

Whenever there is an indication of impairment, the carrying amount of the investment consolidated under the equity method (including goodwill) is subjected to an impairment test, by comparing its recoverable value (the higher of value-in-use and market value less costs to sell) to its carrying amount. Where appropriate, impairment is recognised under "Share of earnings of equity-method entities" in the consolidated income statement and can be reversed at a later date.

If the Group's share of losses of an equity-method entity equals or exceeds the carrying amount of its investment in this entity, the Group discontinues including its share of further losses. The investment is reported at nil value. Additional losses of the equity-method entity are provided for only to the extent that the Group has contracted a legal or constructive obligation, or has made payments on behalf of this entity.

Where the Group holds an interest in an associate, directly or indirectly through an entity that is a venture capital organisation, a mutual fund, an open-ended investment company or similar entity such as an investment-related insurance fund, it may elect to measure that interest at fair value through profit or loss.

Realised gains and losses on investments in consolidated undertakings are recognised in the profit and loss account under "Net gain on non-current assets".

The consolidated financial statements are prepared using uniform accounting policies for similar transactions and other events occurring in similar circumstances.

1.b.3 Consolidation rules

Elimination of intragroup balances and transactions

Intragroup balances arising from transactions between consolidated enterprises, and the transactions themselves (including income, expenses and dividends), are eliminated. Profits and losses arising from intragroup sales of assets are eliminated, except where there is an indication that the asset sold is impaired. Unrealised gains and losses included in the value of financial instruments at fair value through equity and available-for-sale assets are maintained in the consolidated financial statements.

Translation of accounts expressed in foreign currencies

The consolidated financial statements of BNP Paribas are prepared in euros.

The financial statements of enterprises whose functional currency is not the euro are translated using the closing rate method. Under this method, all assets and liabilities, both monetary and non-monetary, are translated using the spot exchange rate at the balance sheet date. Income and expense items are translated at the average rate for the period.

The same method is applied to the financial statements of enterprises located in hyperinflationary economies, after adjusting for the effects of inflation by applying a general price index.

Differences arising from the translation of balance sheet items and profit and loss items are recorded in shareholders' equity under "Exchange differences", and in "Minority interests" for the portion attributable to outside investors. Under the optional treatment permitted by IFRS 1, the Group has reset to zero all translation differences, by booking all cumulative translation differences attributable to shareholders and to minority interests in the opening balance sheet at 1 January 2004 to retained earnings.

On liquidation or disposal of some or all of an interest held in a foreign enterprise located outside the euro zone, leading to a change in the nature of the investment (loss of control, loss of significant influence or loss of joint control without keeping a significant influence), the cumulative exchange difference at the date of liquidation or sale, determined according to the step method, is recognised in the profit and loss account.

Should the percentage of interest change without leading to a modification in the nature of the investment, the exchange difference is reallocated between the portion attributable to shareholders and that attributable to minority interests if the entity is fully consolidated; if the entity is consolidated under the equity method, it is recorded in profit or loss for the portion related to the interest sold.

1.b.4 Business combination and measurement of goodwill

Business combinations

Business combinations are accounted for using the purchase method.

Under this method, the acquiree's identifiable assets and liabilities assumed are measured at fair value at the acquisition date except for non-current assets classified as assets held for sale which are accounted for at fair value less costs to sell.

The acquiree's contingent liabilities are not recognised in the consolidated balance sheet unless they represent a present obligation on the acquisition date and their fair value can be measured reliably.

The cost of a business combination is the fair value, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued to obtain control of the acquiree. Costs directly attributable to the business combination are treated as a separate transaction and recognised through profit or loss.

Any contingent consideration is included in the cost, as soon as control is obtained, at fair value on the date when control was acquired. Subsequent changes in the value of any contingent consideration recognised as a financial liability are recognised through profit or loss.

The Group may recognise any adjustments to the provisional accounting within 12 months of the acquisition date.

Goodwill represents the difference between the cost of the combination and the acquirer's interest in the net fair value of the identifiable assets and liabilities of the acquiree at the acquisition date. Positive goodwill is recognised in the acquirer's balance sheet, while negative goodwill is recognised immediately in profit or loss, on the acquisition date. Minority interests are measured at their share of the fair value of the acquiree's identifiable assets and liabilities. However, for each business combination, the Group can elect to measure minority interests at fair value, in which case a proportion of goodwill is allocated to them. To date, the Group has never used this latter option.

Goodwill is recognised in the functional currency of the acquiree and translated at the closing exchange rate.

On the acquisition date, any previously held equity interest in the acquiree is remeasured at its fair value through profit or loss. In the case of a step acquisition, the goodwill is therefore determined by reference to the acquisition-date fair value.

Since the revised IFRS 3 has been applied prospectively, business combinations completed prior to 1 January 2010 were not restated for the effects of changes to IFRS 3.

As permitted under IFRS 1, business combinations that took place before 1 January 2004 and were recorded in accordance with the previously applicable accounting standards (French GAAP), had not been restated in accordance with the principles of IFRS 3.

Measurement of goodwill

The BNP Paribas Group tests goodwill for impairment on a regular basis.

Cash-generating units

The BNP Paribas Group has split all its activities into cash-generating units[1] representing major business lines. This split is consistent with the Group's organisational structure and management methods, and reflects the independence of each unit in terms of results and management approach. It is reviewed on a regular basis in order to take account of events likely to affect the composition of cash-generating units, such as acquisitions, disposals and major reorganisations.

Testing cash-generating units for impairment

Goodwill allocated to cash-generating units is tested for impairment annually and whenever there is an indication that a unit may be impaired, by comparing the carrying amount of the unit with its recoverable amount. If the recoverable amount is less than the carrying amount, an irreversible impairment loss is recognised, and the goodwill is written down by the excess of the carrying amount of the unit over its recoverable amount.

Recoverable amount of a cash-generating unit

The recoverable amount of a cash-generating unit is the higher of the fair value of the unit less costs to sell, and its value in use.

Fair value is the price that would be obtained from selling the unit at the market conditions prevailing at the date of measurement, as determined mainly by reference to actual prices of recent transactions involving similar entities or on the basis of stock market multiples for comparable companies.

(1) As defined by IAS 36.

Value in use is based on an estimate of the future cash flows to be generated by the cash-generating unit, derived from the annual forecasts prepared by the unit's management and approved by Group Executive Management, and from analyses of changes in the relative positioning of the unit's activities on their market. These cash flows are discounted at a rate that reflects the return that investors would require from an investment in the business sector and region involved.

1.c TRANSLATION OF FOREIGN CURRENCY TRANSACTIONS

The methods used to account for assets and liabilities relating to foreign currency transactions entered into by the Group, and to measure the foreign exchange risk arising on such transactions, depend on whether the asset or liability in question is classified as a monetary or a non-monetary item.

Monetary assets and liabilities[1] expressed in foreign currencies

Monetary assets and liabilities expressed in foreign currencies are translated into the functional currency of the relevant Group entity at the closing rate. Foreign exchange differences are recognised in the profit and loss account, except for those arising from financial instruments designated as a cash flow hedge or a net foreign investment hedge, which are recognised in shareholders' equity.

Non-monetary assets and liabilities expressed in foreign currencies

Non-monetary assets may be measured either at historical cost or at fair value. Non-monetary assets expressed in foreign currencies are translated using the exchange rate at the date of the transaction (i.e. date of initial recognition of the non-monetary asset) if they are measured at historical cost, and at the closing rate if they are measured at fair value.

Foreign exchange differences relating to non-monetary assets denominated in foreign currencies and recognised at fair value (equity instruments) are recognised in profit or loss when the asset is classified in "Financial assets at fair value through profit or loss" and in equity when the asset is classified under "Financial assets at fair value through equity".

1.d NET INTEREST INCOME, COMMISSIONS AND INCOME FROM OTHER ACTIVITIES

1.d.1 Net interest income

Income and expenses relating to debt instruments measured at amortised cost and at fair value through shareholders' equity are recognised in the income statement using the effective interest rate method.

The effective interest rate is the rate that ensures the discounted value of estimated future cash flows through the expected life of the financial instrument or, when appropriate, a shorter period, is equal to the carrying amount of the asset or liability in the balance sheet. The effective interest rate measurement takes into account all fees received or paid that are an integral part of the effective interest rate of the contract, transaction costs, and premiums and discounts.

Commissions considered as an additional component of interest are included in the effective interest rate, and are recognised in the profit and loss account in "Net interest income". This category includes notably commissions on financing commitments when it is considered that the setting up of a loan is more likely than unlikely. Commissions received in respect of financing commitments are deferred until they are drawn and then included in the effective interest rate calculation and amortised over the life of the loan. Syndication commissions are also included in this category for the portion of the commission equivalent to the remuneration of other syndication participants.

1.d.2 Commissions and income from other activities

Commissions received with regards to banking and similar services provided (except for those that are integral part of the effective interest rate), revenues from property development and revenues from services provided in connection with lease contracts fall within the scope of IFRS 15 "Revenue from Contracts with Customers."

This standard defines a single model for recognising revenue based on five-step principles. These five steps enable to identify the distinct performance obligations included in the contracts and allocate the transaction price among them. The income related to those performance obligations is recognised as revenue when the latter are satisfied, namely when the control of the promised goods or services has been transferred.

The price of a service may contain a variable component. Variable amounts may be recognised in the income statement only if it is highly probable that the amounts recorded will not result in a significant downward adjustment.

Commissions

The Group records commission income and expenses in profit or loss:

- either over time as the service is rendered when the client receives continuous service. These include, for example, certain commissions on transactions with customers when services are rendered on a continuous basis, commissions on financing commitments that are not included in the interest margin, because the probability that they give rise to the drawing up of a loan is low, commissions on financial collateral, clearing commissions on financial instruments, commissions related to trust and similar activities, securities custody fees...

  Commissions received under financial guarantee commitments are deemed to represent the initial fair value of the commitment. The resulting liability is subsequently amortised over the term of the commitment, in Commission income;
- or at a point in time when the service is rendered, in other cases. These include, for example, distribution fees received, loan syndication fees remunerating the arrangement service, advisory fees...

(1) Monetary assets and liabilities are assets and liabilities to be received or paid in fixed or determinable amounts of cash.

Income from other activities

Income from property development as well as income from services provided in connection with lease contracts is recorded under "income from other activities" in the income statement.

As regards property development income, the Group records it in profit or loss:

- over time, when the performance obligation creates or enhances an asset on which the customer obtains control as it is created or enhanced (e.g. work in progress controlled by the client on the land in which the asset is located…), or where the service performed does not create an asset that the entity could otherwise use and gives it enforceable right to payment for performance completed to date. This is the case for contracts such as VEFA (sale in the future state of completion) in France;
- at completion in other cases.

Regarding income from services provided in connection with lease contracts, the Group records them in profit or loss as the service is rendered, i.e. in proportion to the costs incurred for maintenance contracts.

1.e FINANCIAL ASSETS AND LIABILITIES

Financial assets, except those relating to insurance activities (see note 1.f) are classified at amortised cost, at fair value through shareholders' equity or at fair value through profit or loss depending on the business model and the contractual features of the instruments at initial recognition.

Financial liabilities are classified at amortised cost or at fair value through profit or loss at initial recognition.

Financial assets and liabilities are recognised in the balance sheet when the Group becomes a party to the contractual provisions of the instrument. Purchases and sales of financial assets made within a period established by the regulations or by a convention in the relevant marketplace are recognised in the balance sheet at the settlement date.

1.e.1 Financial assets at amortised cost

Financial assets are classified at amortised cost if the following two criteria are met: the business model objective is to hold the instrument in order to collect the contractual cash flows and the cash flows consist solely of payments relating to principal and interest on the principal.

Business model criterion

Financial assets are managed within a business model whose objective is to hold financial assets in order to collect cash flows through the collection of contractual payments over the life of the instrument.

The realisation of disposals close to the maturity of the instrument and for an amount close to the remaining contractual cash flows, or due to an increase in the counterparty's credit risk is consistent with a business model whose objective is to collect the contractual cash flows ("collect"). Sales imposed by regulatory requirements or to manage the concentration of credit risk (without an increase in the asset's credit risk) are also consistent with this business model when they are infrequent or insignificant in value.

Cash flow criterion

The cash flow criterion is satisfied if the contractual terms of the debt instrument give rise, on specified dates, to cash flows that are solely repayments of principal and interest on the principal amount outstanding.

The criterion is not met in the event of a contractual characteristic that exposes the holder to risks or to the volatility of contractual cash flows that are inconsistent with those of a non structured or "basic lending" arrangement. It is also not satisfied in the event of leverage that increases the variability of the contractual cash flows.

Interest consists of consideration for the time value of money, for the credit risk, and for the remuneration of other risks (e.g. liquidity risk), costs (e.g. administration fees), and a profit margin consistent with that of a basic lending arrangement. The existence of negative interest does not call into question the cash flow criterion.

The time value of money is the component of interest – usually referred to as the "rate" component – which provides consideration for only the passage of time. The relationship between the interest rate and the passage of time shall not be modified by specific characteristics that would likely call into question the respect of the cash flow criterion.

Thus, when the variable interest rate of the financial asset is periodically reset on a frequency that does not match the duration for which the interest rate is established, the time value of money may be considered as modified and, depending on the significance of that modification, the cash flow criterion may not be met. Some financial assets held by the Group present a mismatch between the interest rate reset frequency and the maturity of the index, or interest rates indexed on an average of benchmark rate. The Group has developed a consistent methodology for analysing this alteration of the time value of money.

Regulated rates meet the cash flow criterion when they provide a consideration that is broadly consistent with the passage of time and does not expose to risks or volatility in the contractual cash flows that would be inconsistent with those of a basic lending arrangement (example: loans granted in the context of Livret A savings accounts).

Some contractual clauses may change the timing or the amount of cash flows. Early redemption options do not call into question the cash flow criterion if the prepayment amount substantially represents the principal amount outstanding and the interest thereon, which may include a reasonable compensation for the early termination of the contract. For example, as regards loans to retail customers, the compensation limited to 6 months of interest or 3% of the capital outstanding is considered as reasonable. Actuarial penalties, corresponding to the discount value of the difference between the residual contractual cash flows of the loan, and their reinvestment in a loan to a similar counterparty or in the interbank market for a similar residual maturity are also considered as reasonable, even when the compensation can be positive or negative (i.e. so called "symmetric" compensations). An option that permits the issuer or the holder of a financial instrument to change the interest rate from floating to fixed rate does not breach the cash flow criterion if the fixed rate is determined at origination, or if it represents the time value of money for the residual maturity of the instrument at the date of exercise of the option.

In the particular case of financial assets contractually linked to payments received on a portfolio of underlying assets and which include a priority order for payment of cash flows between investors ("tranches"), thereby creating concentrations of credit risk, a specific analysis is carried out. The contractual characteristics of the tranche and those of the underlying financial instruments portfolios must meet the cash flow criterion and the credit risk exposure of the tranche must be equal or lower than the exposure to credit risk of the underlying pool of financial instruments.

Certain loans may be "non-recourse", either contractually, or in substance when they are granted to a special purpose entity. That is in particular the case of numerous project financing or asset financing loans. The cash flow criterion is met as long as these loans do not represent a direct exposure on the assets acting as collateral. In practice, the sole fact that the financial asset explicitly gives rise to cash flows that are consistent with payments of principal and interest is not sufficient to conclude that the instrument meets the cash flows criterion. In that case, the particular underlying assets to which there is limited recourse shall be analysed using the "look-through" approach. If those assets do not themselves meet the cash flows criterion, an assessment of the existing credit enhancement has to be performed. The following aspects are considered: structuring and sizing of the transaction, own funds level of the structure, expected source of repayment, volatility of the underlying assets. This analysis is applied to "non-recourse" loans granted by the Group.

The "financial assets at amortised cost" category includes, in particular, loans granted by the Group, as well as, reverse repurchase agreements and securities held by the Group ALM Treasury in order to collect contractual flows and meeting the cash flows criterion.

Recognition

On initial recognition, financial assets are recognised at their fair value, including transaction costs directly attributable to the transaction as well as commissions related to the origination of the loans.

They are subsequently measured at amortised cost, including accrued interest and net of repayments of principal and interest during the past period. These financial assets are also subject from initial recognition, to the measurement of a loss allowance for expected credit losses (note 1.e.5).

Interest is calculated using the effective interest method determined at inception of the contract.

1.e.2 Financial assets at fair value through shareholders' equity

Debt instruments

Debt instruments are classified at fair value through shareholders' equity if the following two criteria are met:

- business model criterion: Financial assets are held in a business model whose objective is achieved by both holding the financial assets in order to collect contractual cash flows and selling the financial assets ("collect and sale"). The latter is not incidental but is an integral part of the business model;
- cash flow criterion: The principles are identical to those applicable to financial assets at amortised cost.

The securities held by the Group ALM Treasury in order to collect contractual flows or to be sold and meeting the cash flow criterion are in particular classified in this category.

On initial recognition, financial assets are recognised at their fair value, including transaction costs directly attributable to the transaction. They are subsequently measured at fair value and changes in fair value are recognised, under a specific line of shareholders' equity entitled "Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss". These financial assets are also subject to the measurement of a loss allowance for expected credit losses on the same approach as for debt instruments at amortised cost. The counterparty of the related impact in cost of risk is recognised in the same specific line of shareholders' equity. On disposal, changes in fair value previously recognised in shareholders' equity are reclassified to profit or loss.

In addition, interest is recognised in the income statement using the effective interest method determined at the inception of the contract.

Equity instruments

Investments in equity instruments such as shares are classified on option, and on a case by case basis, at fair value through shareholders' equity (under a specific line). On disposal of the shares, changes in fair value previously recognised in equity are not recognised in profit or loss. Only dividends, if they represent remuneration for the investment and not repayment of capital, are recognised in profit or loss. These instruments are not subject to impairment.

Investments in mutual funds puttable to the issuer do not meet the definition of equity instruments. They do not meet the cash flow criterion either, and thus are recognized at fair value through profit or loss.

1.e.3 Financing and guarantee commitments

Financing and financial guarantee commitments that are not recognised as derivative instruments at fair value through profit or loss are presented in the note relating to financing and guarantee commitments. They are subject to the measurement of a loss allowance for expected credit losses. These loss allowances are presented under "Provisions for contingencies and charges".

1.e.4 Regulated savings and loan contracts

Home savings accounts (*Comptes Épargne-Logement* – "CEL") and home savings plans (*Plans d'Épargne Logement* – "PEL") are government-regulated retail products sold in France. They combine a savings phase and a loan phase which are inseparable, with the loan phase contingent upon the savings phase.

These products contain two types of obligations for BNP Paribas: an obligation to pay interest on the savings for an indefinite period, at a rate set by the government at the inception of the contract (in the case of PEL products) or at a rate reset every six months using an indexation formula set by law (in the case of CEL products); and an obligation to lend to the customer (at the customer's option) an amount contingent upon the rights acquired during the savings phase, at a rate set at the inception of the contract (in the case of PEL products) or at a rate contingent upon the savings phase (in the case of CEL products).

The Group's future obligations with respect to each generation (in the case of PEL products, a generation comprises all products with the same interest rate at inception; in the case of CEL products, all such products constitute a single generation) are measured by discounting potential future earnings from at-risk outstandings for that generation.

At-risk outstandings are estimated on the basis of a historical analysis of customer behaviour, and are equivalent to:

- for the loan phase: statistically probable loans outstanding and actual loans outstanding;
- for the savings phase: the difference between statistically probable outstandings and minimum expected outstandings, with minimum expected outstandings being deemed equivalent to unconditional term deposits.

Earnings for future periods from the savings phase are estimated as the difference between the reinvestment rate and the fixed savings interest rate on at-risk savings outstanding for the period in question. Earnings for future periods from the loan phase are estimated as the difference between the refinancing rate and the fixed loan interest rate on at-risk loans outstanding for the period in question.

The reinvestment rate for savings and the refinancing rate for loans are derived from the swap yield curve and from the spreads expected on financial instruments of similar type and maturity. Spreads are determined on the basis of actual spreads on fixed rate home loans in the case of the loan phase and products offered to individual clients in the case of the savings phase. In order to reflect the uncertainty of future interest rate trends, and the impact of such trends on customer behaviour models and on at-risk outstandings, the obligations are estimated using the Monte-Carlo method.

Where the sum of the Group's estimated future obligations with respect to the savings and loan phases of any generation of contracts indicates a potentially unfavourable situation for the Group, a provision is recognised (with no offset between generations) in the balance sheet in "Provisions for contingencies and charges". Movements in this provision are recognised as interest income in the profit and loss account.

1.e.5 Impairment of financial assets measured at amortised cost and debt instruments measured at fair value through shareholders' equity

The impairment model for credit risk is based on expected losses.

This model applies to loans and debt instruments measured at amortised cost or fair value through equity, to loan commitments and financial guarantee contracts that are not recognised at fair value, as well as to lease receivables, trade receivables and contract assets.

General model

The Group identifies three "stages" that correspond each to a specific status with regards to the evolution of counterparty credit risk since the initial recognition of the asset.

- 12-month expected credit losses ("stage 1"): If at the reporting date, the credit risk of the financial instrument has not increased significantly since its initial recognition, this instrument is impaired at an amount equal to 12-month expected credit losses (resulting from the risk of default within the next 12 months);
- lifetime expected credit losses for non-impaired assets ("stage 2"): The loss allowance is measured at an amount equal to the lifetime expected credit losses if the credit risk of the financial instrument has increased significantly since initial recognition, but the financial asset is not considered credit-impaired or doubtful;
- lifetime expected credit losses for credit-impaired or doubtful financial assets ("stage 3"): the loss allowance is also measured for an amount equal to the lifetime expected credit losses.

This general model is applied to all instruments within the scope of IFRS 9 impairment, except for purchased or originated credit-impaired financial assets and instruments for which a simplified model is used (see below).

The IFRS 9 expected credit loss approach is symmetrical, i.e. if lifetime expected credit losses have been recognised in a previous reporting period, and if it is assessed in the current reporting period that there is no longer any significant increase in credit risk since initial recognition, the loss allowance reverts to a 12-months expected credit loss.

As regards interest income, under "stage" 1 and 2, it is calculated on the gross carrying amount. Under "stage 3", interest income is calculated on the amortised cost (i.e. the gross carrying amount adjusted for the loss allowance).

Definition of default

The definition of default is aligned with the Basel regulatory default definition, with a rebuttable presumption that the default occurs no later than 90 days past-due.

The definition of default is used consistently for assessing the increase in credit risk and measuring expected credit losses.

Credit-impaired or doubtful financial assets

Definition

A financial asset is considered credit-impaired or doubtful and classified in "stage 3" when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred.

At an individual level, objective evidence that a financial asset is credit-impaired includes observable data regarding the following events: the existence of accounts that are more than 90 days past due; knowledge or indications that the borrower meets significant financial difficulties, such that a risk can be considered to have arisen regardless of whether the borrower has missed any payments; concessions with respect to the credit terms granted to the borrower that the lender would not have considered had the borrower not been meeting financial difficulty (see section "Restructuring of financial assets for financial difficulties").

Specific cases of purchased or originated credit-impaired assets

In some cases, financial assets are credit-impaired at their initial recognition.

For these assets, there is no loss allowance accounted for at initial recognition. The effective interest rate is calculated taking into account the lifetime expected credit losses in the initial estimated cash flows. Any change in lifetime expected credit losses since initial recognition, positive or negative, is recognised as a loss allowance adjustment in profit or loss.

Simplified model

The simplified approach consists in accounting for a loss allowance corresponding to lifetime expected credit losses since initial recognition, and at each reporting date.

The Group applies this model to trade receivables with a maturity shorter than 12 months.

Significant increase in credit risk

The significant increase in credit risk may be assessed on an individual basis or on a collective basis (by grouping financial instruments according to common credit risk characteristics) taking into account all reasonable and supportable information and comparing the risk of default of the financial instrument at the reporting date with the risk of default of the financial instrument at the date of initial recognition.

Assessment of deterioration is based on the comparison of the probabilities of default or the ratings on the date of initial recognition with those existing at the reporting date.

There is also, according to the standard, a rebuttable presumption that the credit risk of an instrument has significantly increased since initial recognition when the contractual payments are more than 30 days past due.

In the consumer credit specialised business, a significant increase in credit risk is also considered when a past due event has occurred within the last 12 months, even if regularized since.

The principles applied to assess the significant increase in credit risk are detailed in note 3.h *Cost of risk*.

Measurement of expected credit losses

Expected credit losses are defined as an estimate of credit losses (i.e. the present value of all cash shortfalls) weighted by the probability of occurrence of these losses over the expected life of financial instruments. They are measured on an individual basis, for all exposures.

In practice, for exposures classified in stage 1 and stage 2, expected credit losses are measured as the product of the Probability of Default ("PD"), Loss Given Default ("LGD") and Exposure At Default ("EAD"), discounted at the Effective Interest Rate of the exposure (EIR). They result from the risk of default within the next 12 months (stage 1), or from the risk of default over the maturity of the facility (stage 2). In the consumer credit specialised business, because of the specificity of credit exposures, the methodology used is based on the probability of transition to term forfeiture, and on discounted loss rates after term forfeiture. The measurement of these parameters is performed on a statistical basis for homogeneous populations.

For exposures classified in stage 3, expected credit losses are measured as the value, discounted at the effective interest rate, of all cash shortfalls over the life of the financial instrument. Cash shortfalls represent the difference between the cash flows that are due in accordance with the contract, and the cash flows that are expected to be received.

The methodology developed is based on existing concepts and methods (in particular the Basel framework) on exposures for which capital requirement for credit risk is measured according to the IRBA methodology. This method is also applied to portfolios for which capital requirement for credit risk is measured according to the standardised approach. Besides, the Basel framework has been adjusted in order to be compliant with IFRS 9 requirements, in particular the use of forward-looking information.

Maturity

All contractual terms of the financial instrument (including prepayment, extension and similar options) over the life of the instrument are taken into account. In the rare cases where the expected life of the financial instrument cannot be estimated reliably, the residual contractual term must be used.

The standard specifies that the maximum period to consider when measuring expected credit losses is the maximum contractual period. However, for revolving credit cards and overdrafts, in accordance with the exception provided by IFRS 9 for these products, the maturity considered for expected credit losses measurement is the period over which the entity is exposed to credit risk, which may extend beyond the contractual maturity (notice period). For revolving credits and overdrafts to non retail counterparties, the contractual maturity can be taken, for example if the next review date is the contractual maturity as they are individually managed.

Probabilities of Default (PD)

The Probability of Default is an estimate of the likelihood of default over a given time horizon.

- The measurement of expected credit losses requires the estimation of both 1-year probabilities of default and lifetime probabilities of default.
- 1-year PDs are derived from long term average regulatory "through the cycle" PDs to reflect the current situation ("Point In Time" or "PIT").

Lifetime PDs are determined from the rating migration matrices reflecting the expected rating evolution of the exposure until maturity, and the associated probabilities of default.

Loss Given Default (LGD)

The Loss Given Default is the difference between the contractual cash flows and the expected cash flows, discounted using the effective interest rate (or an approximation thereof) at the default date. The LGD is expressed as a percentage of the EAD.

The estimate of expected cash flows takes into account cash flows resulting from the sale of collateral held or other credit enhancements if they are part of the contractual terms and are not accounted for separately by the entity (for example, a mortgage associated with a residential loan), net of the costs of obtaining and selling the collateral.

The LGD used for IFRS 9 purpose is derived from the Basel LGD parameter. It is retreated from downturn and conservatism margins (in particular regulatory margins), except margins for model uncertainties.

Exposure At Default (EAD)

The Exposure At Default (EAD) of an instrument is the anticipated outstanding amount owed by the obligor at the time of default. It is determined by the expected payment profile taking into account, depending on the product type: the contractual repayment schedule, expected early repayments and expected future drawings for revolving facilities.

Forward looking

The amount of expected credit losses is measured on the basis of probability-weighted scenarios, in view of past events, current conditions and reasonable and supportable economic forecasts.

The principles applied to take into account forward looking information when measuring expected credit losses are detailed in note 3.h *Cost of risk*.

Write-offs

A write-off consists in reducing the gross carrying amount of a financial asset when there are no longer reasonable expectations of recovering that financial asset in its entirety or a portion thereof, or when it has been fully or partially forgiven. The write-off is recorded when all other means available to the Bank for recovering the receivables or guarantees have failed, and also generally depends on the context specific to each jurisdiction.

If the amount of loss on write-off is greater than the accumulated loss allowance, the difference is an additional impairment loss posted in "Cost of risk". For any receipt occurring when the financial asset (or part of it) is no longer recognised on the balance-sheet, the amount received is recorded as an impairment gain in "Cost of risk".

Recoveries through the repossession of the collateral

When a loan is secured by a financial or a non-financial asset serving as a guarantee and the counterparty is in default, the Group may decide to exercise the guarantee and, according to the jurisdiction, it may then become owner of the asset. In such a situation, the loan is written-off in counterparty of the asset received as collateral.

Once ownership of the asset is carried out, it is accounted for at fair value and classified according to the intent of use.

Restructuring of financial assets for financial difficulties

A restructuring due to the borrower's financial difficulties is defined as a change in the terms and conditions of the initial transaction that the Group is considering only for economic or legal reasons related to the borrower's financial difficulties.

For restructurings not resulting in derecognition of the financial asset, the restructured asset is subject to an adjustment of its gross carrying amount, to reduce it to the discounted amount, at the original effective interest rate of the asset, of the new expected future flows. The change in the gross carrying amount of the asset is recorded in the income statement in "Cost of risk".

The existence of a significant increase in credit risk for the financial instrument is then assessed by comparing the risk of default after the restructuring (under the revised contractual terms) and the risk of default at the initial recognition date (under the original contractual terms). In order to demonstrate that the criteria for recognising lifetime expected credit losses are no longer met, good quality payment behaviour will have to be observed over a certain period of time.

When the restructuring consists of a partial or total exchange against other substantially different assets (for example, the exchange of a debt instrument against an equity instrument), it results in the extinction of the original asset and the recognition of the assets remitted in exchange, measured at their fair value at the date of exchange. The difference in value is recorded in the income statement in "Cost of risk".

Modifications of financial assets that are not due to the borrower's financial difficulties (i.e. commercial renegotiations) are generally analysed as the early prepayment of the former financial asset, which is then derecognised, followed by the set-up of a new financial asset at market conditions.

1.e.6 Cost of risk

Cost of risk includes the following items of income:

- impairment gains and losses resulting from the accounting of loss allowances for 12-month expected credit losses and lifetime expected credit losses ("stage 1" and "stage 2") relating to debt instruments measured at amortised cost or at fair value through shareholders' equity, loan commitments and financial guarantee contracts that are not recognised at fair value as well as lease receivables, contract assets and trade receivables;
- impairment gains and losses resulting from the accounting of loss allowances relating to financial assets for which there is objective evidence of impairment ("stage 3"), write-offs on irrecoverable loans and amounts recovered on loans written-off;
- impairment gains and losses relating to fixed-income securities of insurance entities that are individually impaired (which fall under IAS 39).

It also includes expenses relating to fraud and to disputes inherent to the financing activity.

1.e.7 Financial instruments at fair value through profit or loss

Trading portfolio and other financial assets measured at fair value through profit or loss

The trading portfolio includes instruments held for trading (trading transactions), including derivatives.

Other financial assets measured at fair value through profit or loss include debt instruments that do not meet the "collect" or "collect and sale" business model criterion or that do not meet the cash flow criterion, as well as equity instruments for which the fair value through shareholders' equity option has not been retained.

All those financial instruments are measured at fair value at initial recognition, with transaction costs directly posted in profit or loss. At reporting date, they are measured at fair value, with changes presented in "Net gain/loss on financial instruments at fair value through profit or loss". Income, dividends, and realised gains and losses on disposal related to held-for-trading transactions are accounted for in the same profit or loss account.

Financial liabilities designated as at fair value through profit or loss

Financial liabilities are recognised under option in this category in the two following situations:

- for hybrid financial instruments containing one or more embedded derivatives which otherwise would have been separated and accounted for separately. An embedded derivative is such that its economic characteristics and risks are not closely related to those of the host contract;
- when using the option enables the entity to eliminate or significantly reduce a mismatch in the measurement and accounting treatment of assets and liabilities that would otherwise arise if they were to be classified in separate categories.

Changes in fair value due to the own credit risk are recognised under a specific heading of shareholders' equity.

1.e.8 Financial liabilities and equity instruments

A financial instrument issued or its various components are classified as a financial liability or equity instrument, in accordance with the economic substance of the legal contract.

Financial instruments issued by the Group are qualified as debt instruments if the entity in the Group issuing the instruments has a contractual obligation to deliver cash or another financial asset to the holder of the instrument. The same applies if the Group is required to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the Group, or to deliver a variable number of the Group's own equity instruments.

Equity instruments result from contracts evidencing a residual interest in an entity's assets after deducting all of its liabilities.

Debt securities and subordinated debt

Debt securities and subordinated debt are measured at amortised cost unless they are recognised at fair value through profit or loss.

Debt securities are initially recognised at the issue value including transaction costs, and are subsequently measured at amortised cost using the effective interest method.

Bonds redeemable or convertible into own equity are hybrid instruments that may contain a debt component and an equity component, determined upon initial recognition of the transaction.

Equity instruments

The term "own equity instruments" refers to shares issued by the parent company (BNP Paribas SA) and by its fully consolidated subsidiaries. External costs that are directly attributable to an issue of new shares are deducted from equity net of all related taxes.

Own equity instruments held by the Group, also known as treasury shares, are deducted from consolidated shareholders' equity irrespective of the purpose for which they are held. Gains and losses arising on such instruments are eliminated from the consolidated profit and loss account.

When the Group acquires equity instruments issued by subsidiaries under the exclusive control of BNP Paribas, the difference between the acquisition price and the share of net assets acquired is recorded in retained earnings attributable to BNP Paribas shareholders. Similarly, the liability corresponding to put options granted to minority shareholders in such subsidiaries, and changes in the value of that liability, are offset against minority interests, with any surplus offset against retained earnings attributable to BNP Paribas shareholders. Until these options have been exercised, the portion of net income attributable to minority interests is allocated to minority interests in the profit and loss account. A decrease in the Group's interest in a fully consolidated subsidiary is recognised in the Group's accounts as a change in shareholders' equity.

Financial instruments issued by the Group and classified as equity instruments (e.g. Undated Super Subordinated Notes) are presented in the balance sheet in "Capital and retained earnings".

Distributions from a financial instrument classified as an equity instrument are recognised directly as a deduction from equity. Similarly, the transaction costs of an instrument classified as equity are recognised as a deduction from shareholders' equity.

Own equity instrument derivatives are treated as follows, depending on the method of settlement:

- as equity instruments if they are settled by physical delivery of a fixed number of own equity instruments for a fixed amount of cash or other financial asset. Such instruments are not revalued;
- as derivatives if they are settled in cash or by choice by physical delivery of the shares or in cash. Changes in value of such instruments are taken to the profit and loss account.

If the contract includes an obligation, whether contingent or not, for the bank to repurchase its own shares, the bank recognises the debt at its present value with an offsetting entry in shareholders' equity.

1.e.9 Hedge accounting

The Group retained the option provided by the standard to maintain the hedge accounting requirements of IAS 39 until the future standard on macro-hedging is entered into force. Furthermore, IFRS 9 does not explicitly address the fair value hedge of the interest rate risk on a portfolio of financial assets or liabilities. The provisions in IAS 39 for these portfolio hedges, as adopted by the European Union, continue to apply.

Derivatives contracted as part of a hedging relationship are designated according to the purpose of the hedge.

Fair value hedges are particularly used to hedge interest rate risk on fixed rate assets and liabilities, both for identified financial instruments (securities, debt issues, loans, borrowings) and for portfolios of financial instruments (in particular, demand deposits and fixed rate loans).

Cash flow hedges are particularly used to hedge interest rate risk on floating-rate assets and liabilities, including rollovers, and foreign exchange risks on highly probable forecast foreign currency revenues.

At the inception of the hedge, the Group prepares formal documentation which details the hedging relationship, identifying the instrument, or portion of the instrument, or portion of risk that is being hedged, the hedging strategy and the type of risk hedged, the hedging instrument, and the methods used to assess the effectiveness of the hedging relationship.

On inception and at least quarterly, the Group assesses, in consistency with the original documentation, the actual (retrospective) and expected (prospective) effectiveness of the hedging relationship. Retrospective effectiveness tests are designed to assess whether the ratio of actual changes in the fair value or cash flows of the hedging instrument to those in the hedged item is within a range of 80% to 125%. Prospective effectiveness tests are designed to ensure that expected changes in the fair value or cash flows of the derivative over the residual life of the hedge adequately offset those of the hedged item. For highly probable forecast transactions, effectiveness is assessed largely on the basis of historical data for similar transactions.

Under IAS 39 as adopted by the European Union, which excludes certain provisions on portfolio hedging, interest rate risk hedging relationships based on portfolios of assets or liabilities qualify for fair value hedge accounting as follows:

- the risk designated as being hedged is the interest rate risk associated with the interbank rate component of interest rates on commercial banking transactions (loans to customers, savings accounts and demand deposits);
- the instruments designated as being hedged correspond, for each maturity band, to a portion of the interest rate gap associated with the hedged underlying;
- the hedging instruments used consist exclusively of "plain vanilla" swaps;
- prospective hedge effectiveness is established by the fact that all derivatives must, on inception, have the effect of reducing interest rate risk in the portfolio of hedged underlying. Retrospectively, a hedge will be disqualified from hedge accounting once a shortfall arises in the underlying specifically associated with that hedge for each maturity band (due to prepayment of loans or withdrawals of deposits).

The accounting treatment of derivatives and hedged items depends on the hedging strategy.

In a fair value hedging relationship, the derivative instrument is remeasured at fair value in the balance sheet, with changes in fair value recognised in profit or loss in "Net gain/loss on financial instruments at fair value through profit or loss", symmetrically with the remeasurement of the hedged item to reflect the hedged risk. In the balance sheet, the fair value remeasurement of the hedged component is recognised in accordance with the classification of the hedged item in the case of a hedge of identified assets and liabilities, or under "Remeasurement adjustment on interest rate risk hedged portfolios" in the case of a portfolio hedging relationship.

If a hedging relationship ceases or no longer fulfils the effectiveness criteria, the hedging instrument is transferred to the trading book and accounted for using the treatment applied to this category. In the case of identified fixed-income instruments, the remeasurement adjustment recognised in the balance sheet is amortised at the effective interest rate over the remaining life of the instrument. In the case of interest rate risk hedged fixed-income portfolios, the adjustment is amortised on a straight-line basis over the remainder of the original term of the hedge. If the hedged item no longer appears in the balance sheet, in particular due to prepayments, the adjustment is taken to the profit and loss account immediately.

In a cash flow hedging relationship, the derivative is measured at fair value in the balance sheet, with changes in fair value taken to shareholders' equity on a separate line, "Changes in fair value recognised directly in equity". The amounts taken to shareholders' equity over the life of the hedge are transferred to the profit and loss account under "Net interest income" as and when the cash flows from the hedged item impact profit or loss. The hedged items continue to be accounted for using the treatment specific to the category to which they belong.

If the hedging relationship ceases or no longer fulfils the effectiveness criteria, the cumulative amounts recognised in shareholders' equity as a result of the remeasurement of the hedging instrument remain in equity until the hedged transaction itself impacts profit or loss, or until it becomes clear that the transaction will not occur, at which point they are transferred to the profit and loss account.

If the hedged item ceases to exist, the cumulative amounts recognised in shareholders' equity are immediately taken to the profit and loss account.

Whatever the hedging strategy used, any ineffective portion of the hedge is recognised in the profit and loss account under "Net gain/loss on financial instruments at fair value through profit or loss".

Hedges of net foreign currency investments in subsidiaries and branches are accounted for in the same way as cash flow hedges. Hedging instruments may be foreign exchange derivatives or any other non-derivative financial instrument.

1.e.10 Determination of fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market or most advantageous market, at the measurement date.

The Group determines the fair value of financial instruments either by using prices obtained directly from external data or by using valuation techniques. These valuation techniques are primarily market and income approaches encompassing generally accepted models (e.g. discounted cash flows, Black-Scholes model, and interpolation techniques). They maximize the use of observable inputs and minimize the use of unobservable inputs. They are calibrated to reflect current market conditions and valuation adjustments are applied as appropriate, when some factors such as model, liquidity and credit risks are not captured by the models or their underlying inputs but are nevertheless considered by market participants when setting the exit price.

The unit of measurement is generally the individual financial asset or financial liability but a portfolio-based measurement can be elected, subject to certain conditions. Accordingly, the Group retains this portfolio-based measurement exception to determine the fair value when some group of financial assets and financial liabilities and other contracts within the scope of the standard relating to financial instruments with substantially similar and offsetting market risks or credit risks are managed on the basis of a net exposure, in accordance with the documented risk management strategy.

Assets and liabilities measured or disclosed at fair value are categorised into the three following levels of the fair value hierarchy:

- Level 1: fair values are determined using directly quoted prices in active markets for identical assets and liabilities. Characteristics of an active market include the existence of a sufficient frequency and volume of activity and of readily available prices;
- Level 2: fair values are determined based on valuation techniques for which significant inputs are observable market data, either directly or indirectly. These techniques are regularly calibrated and the inputs are corroborated with information from active markets;
- Level 3: fair values are determined using valuation techniques for which significant inputs are unobservable or cannot be corroborated by market-based observations, due for instance to illiquidity of the instrument and significant model risk. An unobservable input is a parameter for which there are no market data available and that is therefore derived from proprietary assumptions about what other market participants would consider when assessing fair value. The assessment of whether a product is illiquid or subject to significant model risks is a matter of judgment.

The level in the fair value hierarchy within which the asset or liability is categorised in its entirety is based upon the lowest level input that is significant to the entire fair value.

For financial instruments disclosed in Level 3 of the fair value hierarchy, and marginally some instruments disclosed in Level 2, a difference between the transaction price and the fair value may arise at initial recognition. This "Day One Profit" is deferred and released to the profit and loss account over the period during which the valuation parameters are expected to remain non-observable. When parameters that were originally non-observable become observable, or when the valuation can be substantiated in comparison with recent similar transactions in an active market, the unrecognised portion of the day one profit is released to the profit and loss account.

1.e.11 Derecognition of financial assets and financial liabilities

Derecognition of financial assets

The Group derecognises all or part of a financial asset either when the contractual rights to the cash flows from the asset expire or when the Group transfers the contractual rights to the cash flows from the asset and substantially all the risks and rewards of ownership of the asset. Unless these conditions are fulfilled, the Group retains the asset in its balance sheet and recognises a liability for the obligation created as a result of the transfer of the asset.

Derecognition of financial liabilities

The Group derecognises all or part of a financial liability when the liability is extinguished in full or in part.

Repurchase agreements and securities lending/borrowing

Securities temporarily sold under repurchase agreements continue to be recognised in the Group's balance sheet in the category of securities to which they belong. The corresponding liability is recognised at amortised cost under the appropriate "Financial liabilities at amortised cost" category on the balance sheet, except in the case of repurchase agreements contracted for trading purposes, for which the corresponding liability is recognised in "Financial liabilities at fair value through profit or loss".

Securities temporarily acquired under reverse repurchase agreements are not recognised in the Group's balance sheet. The corresponding receivable is recognised at amortised cost under the appropriate "Financial assets at amortised cost" category in the balance sheet, except in the case of reverse repurchase agreements contracted for trading purposes, for which the corresponding receivable is recognised in "Financial assets at fair value through profit or loss".

Securities lending transactions do not result in derecognition of the lent securities, and securities borrowing transactions do not result in recognition of the borrowed securities on the balance sheet. In cases where the borrowed securities are subsequently sold by the Group, the obligation to deliver the borrowed securities on maturity is recognised on the balance sheet under "financial liabilities at fair value through profit or loss".

1.e.12 Offsetting financial assets and financial liabilities

A financial asset and a financial liability are offset and the net amount presented in the balance sheet if, and only if, the Group has a legally enforceable right to set off the recognised amounts, and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Repurchase agreements and derivatives that meet the two criteria set out in the accounting standard are offset in the balance sheet.

1.f ACCOUNTING STANDARDS SPECIFIC TO INSURANCE ACTIVITIES

The specific accounting policies relating to assets and liabilities generated by insurance contracts and financial contracts with a discretionary participation feature written by fully consolidated insurance companies are retained for the purposes of the consolidated financial statements. These policies comply with IFRS 4.

The amendment to IFRS 4 "Insurance Contracts": "Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts" adopted by the European Union on 3 November 2017 provides the option for entities that predominantly undertake insurance activities to defer the effective date of IFRS 9[1] until 1 January 2021. The effect of such a deferral is that those entities may continue to report their financial statements under the existing standard IAS 39.

(1) On 26 June 2019, the IASB published an exposure draft "Amendments to IFRS 17" including in particular the deferral of the mandatory initial application of IFRS 17 as well as the deferral of the expiry date for the temporary exemption from IFRS 9 to 1 January 2022.

This temporary exemption from IFRS 9, which was limited to groups that predominantly undertook insurance activities according to the IASB amendment, has been extended to the insurance sector of financial conglomerates as defined by the Directive 2002/87/EC as adopted by the European Union. This exemption is subject to conditions, notably the absence of internal transfer of financial instruments, other than financial instruments that are measured at fair value through profit or loss, between insurance entities and other entities of the financial conglomerate.

BNP Paribas Group applies this amendment to all its insurance entities, including funds related to this activity, which will apply IAS 39 "Financial instruments: Recognition and Measurement" until 31 December 2020.

All other insurance company assets and liabilities are accounted for using the policies applied to the Group's assets and liabilities generally, and are included in the relevant balance sheet and profit and loss account headings in the consolidated financial statements.

1.f.1 Profit and loss account

Income and expenses recognised under insurance contracts issued by the Group are presented in the income statement under "Net income from insurance activities".

This heading in the income statement includes premiums earned, net gain in investment contracts with no discretionary participation feature and other services, net investment income (including income on investment property and impairment on shares and other equity instruments), technical charges related to contracts (including policyholders surplus reserve), net charges from ceded reinsurance and external charges related to contracts (including commissions).

Other income and expenses relating to insurance activities (i.e. recorded by insurance entities) are presented in the other income statement headings according to their nature.

1.f.2 Financial investments of insurance activities

Investments of insurance activities mainly include:

- investments by insurance entities in financial instruments that are recognised in accordance with the principles of IAS 39, which include investments representing technical reserves of insurance activities and notably unit-linked contracts;
- derivative instruments with a positive fair value. Group insurance entities underwrite derivative instruments for hedging purposes;
- investment properties;
- equity method investments;
- and reinsurers' share in liabilities arising from insurance and investment contracts.

Investments in financial instruments

Financial investments held by the Group's insurance entities are classified in one of the four categories provided for in IAS 39: Financial assets at fair value through profit or loss, held-to-maturity financial assets, loans and receivables and available-for-sale financial assets.

Financial assets at fair value through profit or loss

The category of "Financial assets at fair value through profit or loss" includes derivatives and financial assets that the Group has elected to recognise and measure at fair value through profit or loss at inception, in accordance with the option offered by IAS 39.

Financial assets may be designated at fair value through profit or loss in the following cases (in accordance with IAS 39):

- hybrid financial instruments containing one or more embedded derivatives which otherwise would have been separated and accounted for separately. An embedded derivative is such that its economic characteristics and risks are not closely related to those of the host contract;
- where using the option enables the entity to eliminate or significantly reduce a mismatch in the measurement and accounting treatment of assets and liabilities that would arise if they were to be classified in separate accounting categories;
- when the group of financial assets and/or financial liabilities is managed and measured on the basis of fair value, in accordance with a documented risk management and investment strategy.

Investments held in respect of insurance or investment contracts where the financial risk is borne by policyholders (unit-linked contracts) are recognised at fair value through profit or loss.

When the Group measures at fair value through profit or loss investments made in respect of its insurance activities in entities over which it exercises significant influence or joint control, these investments are presented under the line "Financial assets at fair value through profit or loss" (cf. §1.b.2).

Financial instruments classified in this category are initially recognised at their fair value, with transaction costs being directly recognised in the income statement.

At the closing date, they are valued at their fair value.

Changes in value compared to the last valuation, income, dividends and realised gains and losses are presented under "Net income from insurance activities" and under "Net gain on financial instruments at fair value through profit or loss".

Loans and advances

Fixed or determinable -income securities, which are not quoted in an active market, other than those for which the holder may not recover substantially all of its initial investment for reasons other than credit deterioration, are classified as "Loans and receivables" when they do not meet the conditions for classification as financial assets at fair value through profit or loss.

Loans and receivables are initially recognised at their fair value or equivalent, which generally corresponds to the net amount originally paid.

Loans and receivables are subsequently measured at amortised cost using the effective interest method and net of repayments of principal and interest.

Interest is calculated using the effective interest method, which includes interest, transaction costs and commissions included in their initial value and is presented under "Net income from insurance activities" and under sub-heading "Net gain on financial instruments at amortised cost".

Impairment losses recognised when there is objective evidence of impairment related to an event subsequent to the acquisition of the asset are presented under "Cost of risk".

Held-to-maturity financial assets

"Held-to-maturity financial assets" include debt securities, with fixed maturity, that the Group has the intention and ability to hold until maturity.

Securities classified in this category are recognised at amortised cost using the effective interest method.

Income received on these securities is presented under "Net income from insurance activities" and under sub-heading "Net gain on financial instruments at amortised cost". Impairment losses recognised when there is objective evidence of impairment related to an event subsequent to the acquisition of the asset are presented under "Cost of risk".

Available-for-sale financial assets

The category "Available-for-sale financial assets" includes debt or equity securities that do not fall within the previous three categories.

Assets included in the available-for-sale category are initially recorded at fair value, plus transaction costs where material. At the end of the reporting period, they are valued at their fair value and the changes in the latter, excluding accrued income, are presented under a specific heading of equity. On disposal of the securities, these unrealised gains or losses previously recognised in equity are reclassified in the income statement under the heading "Net income from insurance activities".

Income recognised using the effective interest method on debt securities, dividends received and impairment (in the event of a significant or lasting decline in the value of the securities) of equity securities are presented under "Net income from insurance activities" and under section "Net gain on available-for-sale financial assets". Impairment losses on debt securities are presented under "Cost of risk".

Investment property

Investment property corresponds to buildings held directly by insurance companies and property companies controlled.

Investment property, except for those used for unit-linked contracts, is recognised at cost and follows the accounting methods of the assets described elsewhere.

Investment property, held in respect of unit-linked contracts, is valued at fair value or equivalent, with changes in value recognised in the income statement.

Equity method investments

Investments in entities or real estate funds over which the Group exercises significant influence or joint control and for which the equity method is applied are recognised in the line "Equity method investments".

1.f.3 Technical reserves and other insurance liabilities

The item "Technical reserves and other insurance liabilities" includes:

- commitments to policyholders and beneficiaries of contracts, which include technical reserves for insurance contracts subject to significant insurance hazard (mortality, longevity, disability, incapacity...) and technical liabilities of investment contracts with a discretionary profit-sharing feature, falling within IFRS 4. The discretionary participation clause grants life insurance policyholders the right to receive, in addition to the guaranteed remuneration, a share of the financial results achieved;
- other insurance liabilities related to unit-linked contracts that fall within the scope of IAS 39 (i.e. investment contracts with no discretionary participating features);
- policyholders' surplus reserve;
- liabilities arising from insurance and reinsurance operations, including liabilities due to policyholders;
- financial derivative instruments of insurance activities carried at fair value through profit or loss, the fair value of which is negative. Group insurance entities underwrite derivative instruments for hedging purposes.

Financial liabilities that are not insurance liabilities (e.g. subordinated debt) fall under IAS 39. They are presented in "Financial liabilities at amortised cost".

Insurance and reinsurance contracts and investment contracts with discretionary participating features

Life insurance guarantees cover mainly death risk (term life insurance, annuities, repayment of loans or guaranteed minimum on unit-linked contracts) and, regarding borrowers' insurance, to disability, incapacity and unemployment risks.

For life insurance, technical reserves consist mainly of mathematical reserves that corresponds as a minimum, to the surrender value of contracts and surplus reserve.

The policyholders' surplus reserve also includes amounts resulting from the application of shadow accounting representing the interest of policyholders, mainly within French life insurance subsidiaries, in unrealised gains and losses on assets where the benefit paid under the policy is linked to the return on those assets. This interest is an average derived from stochastic analyses of unrealised gains and losses attributable to policyholders in various scenarios.

A capitalisation reserve is set up in individual statutory accounts of French life-insurance companies on the sale of amortisable securities in order to defer part of the net realised gain and hence maintain the yield to maturity on the portfolio of admissible assets. In the consolidated financial statements, this reserve is reclassified into "Policyholders' surplus" on the liabilities side of the consolidated balance sheet, to the extent that it is highly probable it will be used.

Non-life technical reserves consist of unearned premium reserves (corresponding to the portion of written premiums relating to future periods) and outstanding claims reserves, inclusive of claims handling costs.

At the reporting date, a liability adequacy test is performed: The level of technical reserves (net of acquisition costs outstanding) is compared to the average value of cash flows resulting from stochastic calculations. Related adjustment to technical reserves, if any, is taken to the profit and loss account for the period.

In the event of an unrealised loss on shadow accounted assets, a policyholders' loss reserve is recognised on the assets side of the consolidated balance sheet in an amount equal to the probable deduction from the policyholders' future profit share. The recoverability of the policyholders' loss reserve is assessed prospectively, taking into account policyholders' surplus reserves recognised elsewhere, capital gains on financial assets that are not shadow accounted due to accounting elections made (held-to-maturity financial assets and property investments measured at cost) and the Company's ability and intention to hold the assets carrying the unrealised loss. The policyholders' loss reserve is recognised symmetrically with the corresponding assets and shown on the assets side of the balance sheet under the line item "Accrued income and other assets".

Investment contracts with no discretionary participating features

Investment contracts with no discretionary participating features correspond mainly to unit-linked contracts that do not meet the definition of insurance and investment contracts with discretionary participating features.

Liabilities arising from unit-linked contracts are measured by reference to the fair value of the assets backing these contracts at the closing date.

1.g PROPERTY, PLANT, EQUIPMENT AND INTANGIBLE ASSETS

Property, plant and equipment and intangible assets shown in the consolidated balance sheet are composed of assets used in operations and investment property. Rights-of-use related to leased assets (cf. note 1.h.2) are presented by the lessee within fixed assets in the same category as similar assets held.

Assets used in operations are those used in the provision of services or for administrative purposes, and include non-property assets leased by the Group as lessor under operating leases.

Investment property comprises property assets held to generate rental income and capital gains.

Investment property is recognised at cost, with the exception of those representing insurance or investment contracts whose risk is borne by policyholders (unit-linked contracts), which are measured at fair value through profit or loss and presented in the balance sheet under "Financial investments of insurance activities" (note 1.f.2).

Property, plant and equipment and intangible assets are initially recognised at purchase price plus directly attributable costs, together with borrowing costs where a long period of construction or adaptation is required before the asset can be brought into service.

Software developed internally by the BNP Paribas Group that fulfils the criteria for capitalisation is capitalised at direct development cost, which includes external costs and the labour costs of employees directly attributable to the project.

Subsequent to initial recognition, property, plant and equipment and intangible assets are measured at cost less accumulated depreciation or amortisation and any impairment losses.

The depreciable amount of property, plant and equipment and intangible assets is calculated after deducting the residual value of the asset. Only assets leased by the Group as the lessor under operating leases are presumed to have a residual value, as the useful life of property, plant and equipment and intangible assets used in operations is generally the same as their economic life.

Property, plant and equipment and intangible assets are depreciated or amortised using the straight-line method over the useful life of the asset. Depreciation and amortisation expense is recognised in the profit and loss account under "Depreciation, amortisation and impairment of property, plant and equipment and intangible assets".

Where an asset consists of a number of components which may require replacement at regular intervals, or which have different uses or generate economic benefits at different rates, each component is recognised separately and depreciated using a method appropriate to that component. The BNP Paribas Group has adopted the component-based approach for property used in operations and for investment property.

The depreciation periods used for office property are as follows: 80 years or 60 years for the shell (for prime and other property respectively); 30 years for facades; 20 years for general and technical installations; and 10 years for fixtures and fittings.

Software is amortised, depending on its type, over periods of no more than 8 years in the case of infrastructure developments and 3 years or 5 years in the case of software developed primarily for the purpose of providing services to customers.

Software maintenance costs are expensed as incurred. However, expenditure that is regarded as upgrading the software or extending its useful life is included in the initial acquisition or production cost.

Depreciable property, plant and equipment and intangible assets are tested for impairment if there is an indication of potential impairment at the balance sheet date. Non-depreciable assets are tested for impairment at least annually, using the same method as for goodwill allocated to cash-generating units.

If there is an indication of impairment, the new recoverable amount of the asset is compared with the carrying amount. If the asset is found to be impaired, an impairment loss is recognised in the profit and loss account. This loss is reversed in the event of a change in the estimated recoverable amount or if there is no longer an indication of impairment. Impairment losses are taken to the profit and loss account in "Depreciation, amortisation and impairment of property, plant and equipment and intangible assets".

Gains and losses on disposals of property, plant and equipment and intangible assets used in operations are recognised in the profit and loss account in "Net gain on non-current assets".

Gains and losses on disposals of investment property are recognised in the profit and loss account in "Income from other activities" or "Expense on other activities".

1.h LEASES

Group companies may either be the lessee or the lessor in a lease agreement.

1.h.1 Group company as lessor

Leases contracted by the Group as lessor are categorised as either finance leases or operating leases.

Finance leases

In a finance lease, the lessor transfers substantially all the risks and rewards of ownership of an asset to the lessee. It is treated as a loan made to the lessee to finance the purchase of the asset.

The present value of the lease payments, plus any residual value, is recognised as a receivable. The net income earned from the lease by the lessor is equal to the amount of interest on the loan, and is taken to the profit and loss account under "Interest income". The lease payments are spread over the lease term, and are allocated to reduction of the principal and to interest such that the net income reflects a constant rate of return on the net investment outstanding in the lease. The rate of interest used is the rate implicit in the lease.

Impairments of lease receivables are determined using the same principles as applied to financial assets measured at amortised cost.

Operating leases

An operating lease is a lease under which substantially all the risks and rewards of ownership of an asset are not transferred to the lessee.

The asset is recognised under property, plant and equipment in the lessor's balance sheet and depreciated on a straight-line basis over its useful life. The depreciable amount excludes the residual value of the asset. The lease payments are taken to the profit and loss account in full on a straight-line basis over the lease term. Lease payments and depreciation expenses are taken to the profit and loss account under "Income from other activities" and "Expense on other activities".

1.h.2 Group company as lessee

Lease contracts concluded by the Group, with the exception of contracts whose term is shorter than or equal to 12 months and low-value contracts, are recognized in the balance-sheet in the form of a right-of-use on the leased asset presented under fixed assets, along with the recognition of a financial liability for the rent and other payments to be made over the leasing period. The right-of-use assets are amortised on a straight-line basis and the financial liabilities are amortised on an actuarial basis over the lease period. Dismantling costs corresponding to specific and significant fittings and fixtures are included in the initial right-of-use estimation, in counterparty of a provision liability.

The key hypothesis used by the Group for the measurement of rights of use and lease liabilities are the following:

- the lease term corresponds to the non-cancellable period of the contract, together with periods covered by an extension option if the Group is reasonably certain to exercise this option. In France, the standard commercial lease contract is the so-called "three, six, nine" contract for which the maximum period of use is nine years, with a first non-cancellable period of three years followed by two optional extension periods of three years each; hence, depending on the assessment, the lease term can be of three, six or nine years. For contracts with no enforceable period and which are renewable tacitly, related right-of-use and lease liabilities are recognised based on the termination period if this period is more than twelve months. For contracts with an initial enforceable period of at least one year, which are renewable tacitly for this enforceable period or another enforceable period as long as the notice of termination has not been given, related right of use and lease liabilities are recognised at each date of renewal of an enforceable period;
- the discount rate used to measure the right of use and the lease liability is assessed for each contract as the interest rate implicit in the lease, if that rate can be readily determined, or more generally based on the incremental borrowing rate of the lessee at the date of signature. The incremental borrowing rate is determined considering the average term (duration) of the contract;
- when the contract is modified, a new assessment of the lease liability is made taking into account the new residual term of the contract, and therefore a new assessment of the right of use and the lease liability is established.

1.i NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

Where the Group decides to sell non-current assets or a group of assets and liabilities and it is highly probable that the sale will occur within 12 months, these assets are shown separately in the balance sheet, on the line "Non-current assets held for sale". Any liabilities associated with these assets are also shown separately in the balance sheet, on the line "Liabilities associated with non-current assets held for sale". When the Group is committed to a sale plan involving loss of control of a subsidiary and the sale is highly probable within 12 months, all the assets and liabilities of that subsidiary are classified as held for sale.

Once classified in this category, non-current assets and the group of assets and liabilities are measured at the lower of carrying amount or fair value less costs to sell.

Such assets are no longer depreciated. If an asset or group of assets and liabilities becomes impaired, an impairment loss is recognised in the profit and loss account. Impairment losses may be reversed.

Where a group of assets and liabilities held for sale represents a cash generating unit, it is categorised as a "discontinued operation". Discontinued operations include operations that are held for sale, operations that have been shut down, and subsidiaries acquired exclusively with a view to resell.

In this case, gains and losses related to discontinued operations are shown separately in the profit and loss account, on the line "Post-tax gain/loss on discontinued operations and assets held for sale". This line includes the post-tax profits or losses of discontinued operations, the post-tax gain or loss arising from remeasurement at fair value less costs to sell, and the post-tax gain or loss on disposal of the operation.

1.j EMPLOYEE BENEFITS

Employee benefits are classified in one of four categories:

- short-term benefits, such as salary, annual leave, incentive plans, profit-sharing and additional payments;
- long-term benefits, including compensated absences, long-service awards, and other types of cash-based deferred compensation;
- termination benefits;
- post-employment benefits, including top-up banking industry pensions and retirement bonuses in France and pension plans in other countries, some of which are operated through pension funds.

Short-term benefits

The Group recognises an expense when it has used services rendered by employees in exchange for employee benefits.

Long-term benefits

These are benefits, other than short-term benefits, post-employment benefits and termination benefits. This relates, in particular, to compensation deferred for more than 12 months and not linked to the BNP Paribas share price, which is accrued in the financial statements for the period in which it is earned.

The actuarial techniques used are similar to those used for defined-benefit post-employment benefits, except that the revaluation items are recognised in the profit and loss account and not in equity.

Termination benefits

Termination benefits are employee benefits payable in exchange for the termination of an employee's contract as a result of either a decision by the Group to terminate a contract of employment before the legal retirement age, or a decision by an employee to accept voluntary redundancy in exchange for these benefits. Termination benefits due more than 12 months after the balance sheet date are discounted.

Post-employment benefits

In accordance with IFRS, the BNP Paribas Group draws a distinction between defined-contribution plans and defined-benefit plans.

Defined-contribution plans do not give rise to an obligation for the Group and do not require a provision. The amount of the employer's contributions payable during the period is recognised as an expense.

Only defined-benefit schemes give rise to an obligation for the Group. This obligation must be measured and recognised as a liability by means of a provision.

The classification of plans into these two categories is based on the economic substance of the plan, which is reviewed to determine whether the Group has a legal or constructive obligation to pay the agreed benefits to employees.

Post-employment benefit obligations under defined-benefit plans are measured using actuarial techniques that take demographic and financial assumptions into account.

The net liability recognised with respect to post-employment benefit plans is the difference between the present value of the defined-benefit obligation and the fair value of any plan assets.

The present value of the defined-benefit obligation is measured on the basis of the actuarial assumptions applied by the Group, using the projected unit credit method. This method takes into account various parameters, specific to each country or Group entity, such as demographic assumptions, the probability that employees will leave before retirement age, salary inflation, a discount rate, and the general inflation rate.

When the value of the plan assets exceeds the amount of the obligation, an asset is recognised if it represents a future economic benefit for the Group in the form of a reduction in future contributions or a future partial refund of amounts paid into the plan.

The annual expense recognised in the profit and loss account under "Salaries and employee benefits", with respect to defined-benefit plans includes the current service cost (the rights vested by each employee during the period in return for service rendered), the net interests linked to the effect of discounting the net defined-benefit liability (asset), the past service cost arising from plan amendments or curtailments, and the effect of any plan settlements.

Remeasurements of the net defined-benefit liability (asset) are recognised in shareholders' equity and are never reclassified to profit or loss. They include actuarial gains and losses, the return on plan assets and any change in the effect of the asset ceiling (excluding amounts included in net interest on the defined-benefit liability or asset).

1.k SHARE-BASED PAYMENTS

Share-based payment transactions are payments based on shares issued by the Group, whether the transaction is settled in the form of equity or cash of which the amount is based on trends in the value of BNP Paribas shares.

IFRS 2 requires share-based payments granted after 7 November 2002 to be recognised as an expense. The amount recognised is the value of the share-based payment granted to the employee.

The Group grants employees stock subscription option plans and deferred share-based or share price-linked cash-settled compensation plans, and also offers them the possibility to purchase specially-issued BNP Paribas shares at a discount, on condition that they retain the shares for a specified period.

Stock option and share award plans

The expense related to stock option and share award plans is recognised over the vesting period, if the benefit is conditional upon the grantee's continued employment.

Stock options and share award expenses are recorded under salary and employee benefits expenses, with a corresponding adjustment to shareholders' equity. They are calculated on the basis of the overall plan value, determined at the date of grant by the Board of directors.

In the absence of any market for these instruments, financial valuation models are used that take into account any performance conditions related to the BNP Paribas share price. The total expense of a plan is determined by multiplying the unit value per option or share awarded by the estimated number of options or shares awarded vested at the end of the vesting period, taking into account the conditions regarding the grantee's continued employment.

The only assumptions revised during the vesting period, and hence resulting in a remeasurement of the expense, are those relating to the probability that employees will leave the Group and those relating to performance conditions that are not linked to the price value of BNP Paribas shares.

Share price-linked cash-settled deferred compensation plans

The expense related to these plans is recognised in the year during which the employee rendered the corresponding services.

If the payment of share-based variable compensation is explicitly subject to the employee's continued presence at the vesting date, the services are presumed to have been rendered during the vesting period and the corresponding compensation expense is recognised on a pro rata basis over that period. The expense is recognised under salary and employee benefits expenses with a corresponding liability in the balance sheet. It is revised to take into account any non-fulfilment of the continued presence or performance conditions and the change in BNP Paribas share price.

If there is no continued presence condition, the expense is not deferred, but recognised immediately with a corresponding liability in the balance sheet. This is then revised on each reporting date until settlement to take into account any performance conditions and the change in the BNP Paribas share price.

1.l PROVISIONS RECORDED UNDER LIABILITIES

Provisions recorded under liabilities (other than those relating to financial instruments, employee benefits and insurance contracts) mainly relate to restructuring, claims and litigation, fines and penalties, and tax risks.

A provision is recognised when it is probable that an outflow of resources embodying economic benefits will be required to settle an obligation arising from a past event, and a reliable estimate can be made of the amount of the obligation. The amount of such obligations is discounted, where the impact of discounting is material, in order to determine the amount of the provision.

1.m CURRENT AND DEFERRED TAX

The current income tax charge is determined on the basis of the tax laws and tax rates in force in each country in which the Group operates during the period in which the income is generated.

Deferred taxes are recognised when temporary differences arise between the carrying amount of an asset or liability in the balance sheet and its tax base.

Deferred tax liabilities are recognised for all taxable temporary differences other than:

- taxable temporary differences on initial recognition of goodwill;
- taxable temporary differences on investments in enterprises under the exclusive or joint control of the Group, where the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences and unused carryforwards of tax losses only to the extent that it is probable that the entity in question will generate future taxable profits against which these temporary differences and tax losses can be offset.

Deferred tax assets and liabilities are measured using the liability method, using the tax rate which is expected to apply to the period when the asset is realised or the liability is settled, based on tax rates and tax laws that have been or will have been enacted by the balance sheet date of that period. They are not discounted.

Deferred tax assets and liabilities are offset when they arise within the same tax group, they fall under the jurisdiction of a single tax authority, and there is a legal right to offset.

As regards the assessment of uncertainty over income tax treatments, the Group adopts the following approach:

- the Group assesses whether it is probable that a taxation authority will accept an uncertain tax treatment;
- any uncertainty shall be reflected when determining the taxable profit (loss) by considering either the most likely amount (having the higher probability of occurrence), or the expected value (sum of the probability-weighted amounts).

Current and deferred taxes are recognised as tax income or expenses in the profit and loss account, except for those relating to a transaction or an event directly recognised in shareholders' equity, which are also recognised in shareholders' equity. This concerns in particular the tax effect of coupons paid on financial instruments issued by the Group and qualified as equity instruments, such as Undated Super Subordinated Notes.

When tax credits on revenues from receivables and securities are used to settle corporate income tax payable for the period, the tax credits are recognised on the same line as the income to which they relate. The corresponding tax expense continues to be carried in the profit and loss account under "Corporate income tax".

1.n CASH FLOW STATEMENT

The cash and cash equivalents balance is composed of the net balance of cash accounts and accounts with central banks, and the net balance of interbank demand loans and deposits.

Changes in cash and cash equivalents related to operating activities reflect cash flows generated by the Group's operations, including those relating to financial investments of insurance activities and negotiable certificates of deposit.

Changes in cash and cash equivalents related to investing activities reflect cash flows resulting from acquisitions and disposals of subsidiaries, associates or joint ventures included in the consolidated group, as well as acquisitions and disposals of property, plant and equipment excluding investment property and property held under operating leases.

Changes in cash and cash equivalents related to financing activities reflect the cash inflows and outflows resulting from transactions with shareholders, cash flows related to bonds and subordinated debt, and debt securities (excluding negotiable certificates of deposit).

1.o USE OF ESTIMATES IN THE PREPARATION OF THE FINANCIAL STATEMENTS

Preparation of the financial statements requires managers of core businesses and corporate functions to make assumptions and estimates that are reflected in the measurement of income and expense in the profit and loss account and of assets and liabilities in the balance sheet, and in the disclosure of information in the notes to the financial statements. This requires the managers in question to exercise their judgement and to make use of information available at the date of the preparation of the financial statements when making their estimates. The actual future results from operations where managers have made use of estimates may in reality differ significantly from those estimates, mainly according to market conditions. This may have a material effect on the financial statements.

This applies in particular to:

- the analysis of the cash flow criterion for specific financial assets;
- the measurement of expected credit losses. This applies in particular to the assessment of significant increase in credit risk, the models and assumptions used to measure expected credit losses, the determination of the different economic scenarios and their weighting;
- the analysis of renegotiated loans, in order to assess whether they should be maintained on the balance-sheet or derecognised;
- the assessment of an active market, and the use of internally developed models for the measurement of the fair value of financial instruments not quoted in an active market classified in "Financial assets at fair value through equity", or in "Financial instruments at fair value through profit or loss", whether as assets or liabilities, and more generally calculations of the fair value of financial instruments subject to a fair value disclosure requirement;
- the assumptions applied to assess the sensitivity to each type of market risk of the market value of financial instruments and the sensitivity of these valuations to the main unobservable inputs as disclosed in the notes to the financial statements;
- the appropriateness of the designation of certain derivative instruments such as cash flow hedges, and the measurement of hedge effectiveness;
- impairment tests performed on intangible assets;
- the deferred tax assets;
- the estimation of insurance technical reserves and policyholders surplus reserves;
- the measurement of uncertainty over income tax treatments and other provisions for contingencies and charges. In particular, while investigations and litigations are ongoing, it is difficult to foresee their outcome and potential impact. Provision estimation is established by taking into account all available information at the date of the preparation of the financial statements, in particular the nature of the dispute, the underlying facts, the ongoing legal proceedings and court decisions, including those related to similar cases. The Group may also use the opinion of experts and independent legal advisers to exercise its judgement.

Note 2 EFFECT OF IFRS 16 FIRST TIME ADOPTION

As of 1 January 2019, BNP Paribas Group has applied the new accounting standard IFRS 16 "Leases". The Group decided to apply the simplified retrospective transition requirement, with the cumulative effect in equity. This impact in equity results from the difference between:

- a right of use and its amortisation as if the standard had been applied since the origination of the contract, discounted at the standard first application date;
- a lease liability discounted at the standard first application date.

The discount rate applied for the measurement of both the right of use and the lease liability is the incremental borrowing rate based on the residual maturity of each contract at the date of the initial application of the standard. The average discount rates used on 1 January 2019 is 1.96%.

The Group has applied the main simplification measures offered by the standard when applying the simplified retrospective transition method, in particular the absence of accounting for a right-of-use for contracts whose residual maturity is lower than twelve months at transition date.

As part of the set up of this standard, the Group has identified rights-of-use of leased assets. A good is considered to be leased if the contract confers the right for the lessee, to control the use of a particular asset for a certain period of time for a consideration. In each case, the Group assessed:

- the identifiable nature of the asset, which presupposes that the lessor has no substantial right of substitution at the date of the contract;
- the effective nature of the control on the asset, which presumes for the lessor the right to obtain substantially all of the economic benefits arising from use of the asset, as well as the ability to decide on its use.

Where the lease also contains a non-rental component such as the provision of services, only the share of the rental corresponding to the rental component is taken into account by the Group in the valuation of the rights-of-use. The identification of rental or non-rental component is carried out on the basis of their individual contract price or otherwise on the basis of the observable comparable information.

For the calculation of the lease liability, the Group retains amounts, excluding value added tax of the following elements:

- fixed rents;
- variable rents dependent on an index, such as the construction index, or an interest rate;
- as well as all expected residual value guarantee payments, the exercise price of call options and termination penalties.

Rents based on usage level or performance of a good are excluded from the calculation of the lease liability.

The lease contracts identified are essentially property leases, and to a lesser extent computer and banking equipment leases and vehicles leases. Property leases encompass either commercial agencies for retail banking, or operating offices (office buildings, head offices…) in France or abroad.

The Group made the choice not to apply the exemption to the accounting of initial deferred tax assets (DTA) and deferred liabilities (DTL) permitted by paragraphs 15 and 24 of IAS 12 "Income taxes". Consequently, distinct deferred tax assets and deferred tax liabilities will be accounted for with regards to the balance sheet amounts of rights of use and lease liabilities of the lessee.

The main impacts on the balance-sheet are a negative effect of EUR 146 million (net of tax) in equity, an increase of fixed assets by EUR 3,357 million, the recognition of a lease liability of EUR 3,568 million and an increase of deferred tax assets by EUR 45 million (after compensation of DTA and DTL in accordance with the principles detailed in section 1.m *Current and deferred tax*).

The following table presents the balance-sheet accounts impacted by the first application of IFRS 16.

In millions of euros	31 December 2018	Effect of the IFRS16 adoption	1st January 2019
ASSETS			
Current and deferred tax assets	7,220	45	7,265
Accrued income and other assets	103,346	7	103,353
Property, plant and equipment and investment property	26,652	3,357	30,009
Of which gross value	*42,006*	*6,639*	*48,645*
Of which accumulated depreciation, amortisation and impairment	*(15,354)*	*(3,282)*	*(18,636)*
TOTAL EFFECT ON ASSETS		**3,409**	
LIABILITIES			
Deposits from credit institutions	78,915	(11)	78,904
Current and deferred tax liabilities	2,255	(2)	2,253
Accrued expenses and other liabilities	89,562	3,568	93,130
TOTAL EFFECT ON LIABILITIES		**3,555**	
EQUITY			
Shareholders' equity	101,467	(141)	101,326
Minority interests	4,259	(5)	4,254
TOTAL EFFECT ON EQUITY		**(146)**	
TOTAL EFFECT ON LIABILITIES		**3,409**	

Note 3 NOTES TO THE PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2019

3.a NET INTEREST INCOME

The BNP Paribas Group includes in "Interest income" and "Interest expense" all income and expense calculated using the effective interest method (interest, fees and transaction costs) from financial instruments measured at amortised cost and financial instruments measured at fair value through equity.

These items also include the interest income and expense of non-trading financial instruments the characteristics of which do not allow for recognition at amortised cost or at fair value through equity, as well as of financial instruments that the Group has designated as at fair value through profit or loss. The change in fair value on financial instruments at fair value through profit or loss (excluding accrued interest) is recognised under "Net gain on financial instruments at fair value through profit or loss".

Interest income and expense on derivatives accounted for as fair value hedges are included with the revenues generated by the hedged item. Similarly, interest income and expense arising from derivatives used to hedge transactions designated as at fair value through profit or loss is allocated to the same accounts as the interest income and expense relating to the underlying transactions.

In millions of euros	Year to 31 Dec. 2019			Year to 31 Dec. 2018		
	Income	Expense	Net	Income	Expense	Net
Financial instruments at amortised cost	**30,715**	**(12,278)**	**18,437**	**29,115**	**(10,482)**	**18,633**
Deposits, loans and borrowings	27,790	(9,083)	18,707	26,957	(8,069)	18,888
Repurchase agreements	186	(88)	98	152	(59)	93
Finance leases	1,398	(86)	1,312	1,312	(73)	1,239
Debt securities	1,341		1,341	694		694
Issued debt securities and subordinated debt		(3,021)	(3,021)		(2,281)	(2,281)
Financial instruments at fair value through equity	**1,076**	**-**	**1,076**	**965**	**-**	**965**
Debt securities	1,076		1,076	965		965
Financial instruments at fair value through profit or loss (Trading securities excluded)	**63**	**(347)**	**(284)**	**42**	**(442)**	**(400)**
Cash flow hedge instruments	**2,746**	**(1,159)**	**1,587**	**2,941**	**(1,369)**	**1,572**
Interest rate portfolio hedge instruments	**2,727**	**(2,349)**	**378**	**2,660**	**(2,368)**	**292**
Lease liabilities	**-**	**(67)**	**(67)**			
TOTAL INTEREST INCOME/(EXPENSE)	**37,327**	**(16,200)**	**21,127**	**35,723**	**(14,661)**	**21,062**

Interest income on individually impaired loans amounted to EUR 432 million for the year ended 31 December 2019, compared to EUR 454 million for the year ended 31 December 2018.

3.b COMMISSION INCOME AND EXPENSE

In millions of euros	Year to 31 Dec. 2019			Year to 31 Dec. 2018		
	Income	Expense	Net	Income	Expense	Net
Customer transactions	4,535	(1,246)	3,289	4,406	(1,157)	3,249
Securities and derivatives transactions	1,751	(1,283)	468	1,729	(1,187)	542
Financing and guarantee commitments	1,276	(59)	1,217	1,102	(44)	1,058
Asset management and other services	4,769	(288)	4,481	4,723	(246)	4,477
Others	934	(1,024)	(90)	965	(1,084)	(119)
COMMISSION INCOME/EXPENSE	**13,265**	**(3,900)**	**9,365**	**12,925**	**(3,718)**	**9,207**
of which net commission income related to trust and similar activities through which the Group holds or invests assets on behalf of clients, trusts, pension and personal risk funds or other institutions	*2,753*	*(210)*	*2,543*	*2,834*	*(261)*	*2,573*
of which commission income and expense on financial instruments not measured at fair value through profit or loss	*3,105*	*(490)*	*2,615*	*3,005*	*(427)*	*2,578*

3.c NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Net gain on financial instruments measured at fair value through profit or loss includes all profit and loss items relating to financial instruments held for trading, non-trading equity instruments that the Group did not choose to measure at fair value through equity, financial instruments that the Group has designated as at fair value through profit or loss, as well as debt instruments whose cash flows are not solely repayments of principal and interest on the principal or whose business model is not to collect cash flows nor to collect cash flows and sell the assets.

These income items include dividends on these instruments and exclude interest income and expense from financial instruments designated as at fair value through profit or loss and instruments whose cash flows are not only repayments of principal and interest on the principal or whose business model is not to collect cash flows nor to collect cash flows and sell the assets, which are presented in "Net interest income" (note 3.a).

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Financial instruments held for trading	**11,768**	**(1,470)**
Interest rate and credit instruments	7,489	1,975
Equity financial instruments	3,562	(2,926)
Foreign exchange financial instruments	2,203	1,432
Loans and repurchase agreements	(1,573)	(1,126)
Other financial instruments	87	(825)
Financial instruments designated as at fair value through profit or loss	**(5,217)**	**6,756**
Other financial instruments at fair value through profit or loss	**585**	**533**
Debt instruments	5	(38)
Equity instruments	580	571
Impact of hedge accounting	**(25)**	**(11)**
Fair value hedging derivatives	1,014	134
Hedged items in fair value hedge	(1,039)	(145)
NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS	**7,111**	**5,808**

Gains and losses on financial instruments designated as at fair value through profit or loss are mainly related to instruments which changes in value may be compensated by changes in the value of economic hedging derivative financial instruments in the trading book.

Net gains on the trading book in 2019 and 2018 include a non-material amount related to the ineffective portion of cash flow hedges.

Potential sources of ineffectiveness can be the differences between hedging instruments and hedged items, notably generated by mismatches in the terms of hedged and hedging instruments, such as the frequency and timing of interest rates resetting, the frequency of payment and the discounting factors, or when hedging derivatives have a non-zero fair value at inception date of the hedging relationship. Credit valuation adjustments applied to hedging derivatives are also sources of ineffectiveness.

Cumulated changes in fair value related to discontinued cash flow hedge relationships, previously recognised in equity and included in 2019 profit and loss account were not material, whether the hedged item ceased to exist or not.

3.d NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH EQUITY

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Net gain on debt instruments[(1)]	234	213
Dividend income on equity instruments	116	102
NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH EQUITY	**350**	**315**

(1) *Interest income from debt instruments is included in "Net interest income" (note 3.a), and impairment losses related to potential issuer default are included in "Cost of risk" (note 3.h).*

Unrealised gains and losses on debt securities previously recorded under "Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss" and included in the pre-tax income, amount to a gain of EUR 194 million for the year ended 31 December 2019, compared with EUR 110 million for the year ended 31 December 2018.

3.e NET INCOME FROM INSURANCE ACTIVITIES

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Premiums earned	24,183	27,026
Net gain from investment contracts with discretionary participation feature and other services	32	29
Net income/(expense) from financial investments	14,858	(2,133)
Technical charges related to contracts	(32,423)	(18,487)
Net charges from ceded reinsurance	(118)	(267)
Policy benefit expenses	(2,095)	(2,104)
NET INCOME FROM INSURANCE ACTIVITIES	**4,437**	**4,064**

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Net gain on available-for-sale financial assets	3,273	3,501
Interest income and dividends	*3,040*	*3,109*
Additions to impairment provisions	*(160)*	*(33)*
Net disposal gains	*393*	*425*
Net gain/(loss) on financial instruments at fair value through profit or loss	11,278	(6,002)
Net gain on financial instruments at amortised cost	106	213
Investment property income	200	155
Share of earnings of equity-method investments	5	7
Other expense	(4)	(7)
NET INCOME/(EXPENSE) FROM FINANCIAL INVESTMENTS	**14,858**	**(2,133)**

3.f NET INCOME FROM OTHER ACTIVITIES

In millions of euros	Year to 31 Dec. 2019			Year to 31 Dec. 2018		
	Income	Expense	Net	Income	Expense	Net
Net income from investment property	155	(34)	121	165	(69)	96
Net income from assets held under operating leases	10,648	(9,090)	1,558	9,845	(8,406)	1,439
Net income from property development activities	1,069	(867)	202	898	(676)	222
Other net income	1,630	(1,307)	323	1,416	(1,108)	308
TOTAL NET INCOME FROM OTHER ACTIVITIES	**13,502**	**(11,298)**	**2,204**	**12,324**	**(10,259)**	**2,065**

3.g OTHER OPERATING EXPENSES

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
External services and other operating expenses	(9,495)	(10,498)
Taxes and contributions[(1)]	(1,844)	(1,792)
TOTAL OTHER OPERATING EXPENSES	**(11,339)**	**(12,290)**

(1) Contributions to European resolution funds, including exceptional contributions, amount to EUR 646 million for the year ended 31 December 2019 compared with EUR 607 million for the year ended 31 December 2018.

3.h COST OF RISK

The Group general model for impairment described in note 1.e.5 used by the Group relies on the following two steps:

- assessing whether there has been a significant increase in credit risk since initial recognition;
- measuring impairment allowance as either 12-month expected credit losses or lifetime expected credit loss. (i.e. loss expected at maturity).

Both steps shall rely on forward looking information.

Significant increase in credit risk

The assessment of increase in credit risk is done at instrument level based on indicators and thresholds that vary depending on the nature of the exposure and the type of the counterparty.

The internal credit rating methodology used by the Group is described in chapter 5. Pillar 3 of the Universal registration document (section 5.4 *Credit risk*).

Wholesale (Corporates/Financial institutions/ Sovereigns) and bonds

The indicator used for assessing increase in credit risk is the internal counterparty rating of the obligor of the facility.

The deterioration in credit quality is considered significant, and the facility is therefore placed in stage 2, if the difference between the counterparty rating at origination and the one as at the reporting date is equal or superior to 3 notches (for instance, a downgrade from 4- to 5-).

The low risk expedient permitted by IFRS 9 (i.e. whereby bonds with an investment grade rating at reporting date are considered as stage 1, and bonds with a non-investment grade rating at reporting date are considered as stage 2) is used only for debt securities for which no ratings are available at acquisition date.

SME Corporates facilities and Retail

As far as SME Corporates exposures are concerned, the indicator used for assessing increase in credit risk is also the internal counterparty rating of the obligor of the facility. Due to a higher volatility in the rating system applied, deterioration is considered significant, and the facility is therefore placed in stage 2, if the difference between the counterparty rating at origination and the one as at the reporting date is equal or superior to 6 notches.

For retail exposures, two alternative risk indicators of increase in credit risk can be taken into consideration:

- probability of Default (PD): Changes in the 1-year probability of default are considered as a reasonable approximation of changes in the lifetime probability of default. Deterioration in credit quality is considered significant, and the facility is therefore placed in stage 2, if the ratio (1 year PD at the reporting date/1 year PD at origination) is higher than 4;
- existence of a past due within the last 12 months: in the consumer credit specialised business, the existence of a past due that has occurred within the last 12 months, even if regularised since, is considered as a significant deterioration in credit risk and the facility is therefore placed into stage 2.

Furthermore, for all portfolios (except consumer credit specialised business):

- the facility is assumed to be in stage 1 when its rating is better than or equal to 4- (or its 1 year PD is below or equal to 0.25%) at reporting date, since changes in PD related to downgrades in this zone are less material, and therefore not considered as "significant";
- when the rating is worse than or equal to 9+ (or the 1 year PD is above 10%) at reporting date considering the Group's practice in terms of credit origination, it is considered as significantly deteriorated and therefore placed into stage 2 (as long as the facility is not credit-impaired).

As a backstop, when an asset becomes 30 days past due, the credit risk is deemed to have increased significantly since initial recognition and the asset is therefore placed into stage 2.

Forward Looking Information

The Group considers forward-looking information both when assessing significant increase in credit risk and when measuring Expected Credit Losses (ECL).

Regarding the assessment of significant increase in credit risk, beyond the rules based on the comparison of risk parameters between initial recognition and reporting date (cf. "significant increase in credit risk" section), the determination of significant increase in credit risk is supplemented by the consideration of more systemic forward looking factors (such as macroeconomic, sectorial or geographical risk drivers) that could increase the credit risk of some exposures. These factors can lead to tighten the transfer criteria into stage 2, resulting in an increase of ECL amounts for exposures deemed vulnerable to these risk drivers.

Regarding the measurement of expected credit losses, the Group has made the choice to use 3 macroeconomic scenarios by geographic area covering a wide range of potential future economic conditions:

- a baseline scenario, consistent with the scenario used for budgeting;
- an adverse scenario, corresponding to the scenario used quarterly in Group stress tests;
- a favourable scenario, allowing to capture situations where the economy performs better than anticipated.

The link between the macroeconomic scenarios and the ECL measurement is mainly achieved through a modelling of the probabilities of default and deformation of migration matrices based on internal rating (or risk parameter). The probabilities of default determined according to these scenarios are used to measure expected credit losses under each scenario.

The weighting of the expected credit losses under each scenario is performed as follows:

- 50% for the baseline scenario;
- the weighting of the two alternative scenarios is computed using a relationship with the position in the credit cycle. In this approach, the adverse scenario receives a higher weight when the economy is in strong expansion than in lower growth period in anticipation of a potential downturn of the economy.

In addition, when appropriate, the ECL measurement can take into account scenarios of sale of the assets.

Macroeconomic scenarios

The three macroeconomic scenarios are defined with a 3-year horizon. They correspond to:

- a baseline scenario which describes the most likely path of the economy over the projection horizon. This scenario is updated on a quarterly basis. It is designed by Group Economic Research in collaboration with various experts within the Group. Projections are provided for key markets of the Group, through main macroeconomic variables (GDP and its components, unemployment rate, consumer prices, interest rates, foreign exchange rates, oil prices, real estate prices, etc.) which are drivers for risk parameter models used downstream in the credit stress testing process;
- an adverse scenario which describes the impact of the materialisation of some of the risks weighing on the baseline scenario, resulting in a much less favourable economic path than in the baseline scenario. The starting point is a shock on GDP. This shock on GDP is applied with variable magnitudes, but simultaneously among economies when the crisis considered is a global contemporaneous crisis. These assumptions are broadly consistent with those proposed by the regulators. Other variables (unemployment, inflation, interest rate) are deducted on the basis of econometric relationships and expert judgment;
- a favourable scenario which reflects the impact of the materialisation of some of the upside risks for the economy, resulting in a much more favourable economic path. To achieve an unbiased estimation of provisions, the favourable scenario is designed in such a way that the probability of the shock on GDP growth (on average over the cycle) is equal to the probability of the corresponding shock in the adverse scenario. The magnitude of favourable GDP shocks generally corresponds to 80%-95% of the magnitude of adverse GDP shocks. Other variables (unemployment, inflation, interest rate) are deducted in the same way as in the adverse scenario.

The adverse scenario assumes that a number of risks for the economy materialise, leading to a much poorer economic trajectory than in the reference scenario. The assumptions used for the adverse scenario at 31 December 2019 are as follows:

- negative impact on international trade from the trade dispute between the United States and China and its consequences for financial markets;
- Brexit-related risks: uncertainty surrounding the terms of the future relationship between the United Kingdom and the European Union remains high. The United Kingdom could suffer disruption in some sectors with higher uncertainty impacting investment and consumption, weaker commercial momentum, financial tensions and negative impacts on Real estate markets. The euro zone would also be affected by negative Brexit impacts;
- possible tensions in the euro zone related to public finances: high public debt ratios in some countries at a time when activity could slow;
- significant correction to some stock and real estate markets: with a slowing growth cycle, a correction could affect some markets;
- geopolitical risks: tensions in the Middle East could affect the global economy with price shocks impacting raw materials and business confidence;
- difficulties in emerging markets: some emerging markets have internal economic imbalances, owing to the strength of the US dollar, political changes at a national level and deteriorating international relations. In some cases, activity could be more affected than currently estimated;
- slowdown in China: a more pronounced slowdown in activity than anticipated or a further deterioration in public finance ratios and levels of external sales, could have an impact on financial markets at a global level, affecting global trade and the price of raw materials.

The effect of the adverse scenario on GDP growth in OECD countries is reflected in the gap vis-à-vis the central scenario after three years of between -6% and -12% according to the country and, in particular, -7% on average in terms of euro zone growth and -6% in terms of United States growth.

At 31 December 2019, the weighting of the adverse scenario is 26% for the Group (24% for the favourable scenario), reflecting a position above the average of the credit cycle, with a very favourable level in its domestic markets offset by a global economic slowdown, particularly in emerging countries.

➤ COST OF CREDIT RISK FOR THE PERIOD

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Net allowances to impairment	(2,649)	(2,490)
Recoveries on loans and receivables previously written off	429	483
Losses on irrecoverable loans	(983)	(757)
TOTAL COST OF RISK FOR THE PERIOD	**(3,203)**	**(2,764)**

COST OF RISK FOR THE PERIOD BY ACCOUNTING CATEGORIES AND ASSET TYPE

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Cash and balances at central banks	(1)	(5)
Financial instruments at fair value through profit or loss	4	(32)
Financial assets at fair value through equity		(12)
Financial assets at amortised cost	(3,050)	(2,690)
Loans and receivables	*(3,057)*	*(2,648)*
Debt securities	*7*	*(42)*
Other assets	(4)	(5)
Financing and guarantee commitments and other items	(152)	(20)
TOTAL COST OF RISK FOR THE PERIOD	**(3,203)**	**(2,764)**
Cost of risk on unimpaired assets and commitments	*37*	*195*
of which stage 1	*(161)*	*(155)*
of which stage 2	*198*	*350*
Cost of risk on impaired assets and commitments – stage 3	*(3,240)*	*(2,959)*

CREDIT RISK IMPAIRMENT

Change in impairment by accounting category and asset type during the period

In millions of euros	31 December 2018	Net allowance to impairment	Impairment provisions used	Effect of exchange rate movements and other	31 December 2019
Assets impairment					
Amounts due from central banks	15	1		(1)	15
Financial instruments at fair value through profit or loss	191	(39)		(3)	149
Impairment of assets at fair value through equity	140	-		1	141
Financial assets at amortised cost	24,362	2,582	(5,560)	27	21,411
Loans and receivables	*24,232*	*2,591*	*(5,560)*	*14*	*21,277*
Debt securities	*130*	*(9)*		*13*	*134*
Other assets	80	10			90
Total impairment of financial assets	**24,788**	**2,554**	**(5,560)**	**24**	**21,806**
of which stage 1	*1,581*	*124*	*(2)*	*(27)*	*1,676*
of which stage 2	*3,325*	*(210)*	*(10)*	*40*	*3,145*
of which stage 3	*19,882*	*2,640*	*(5,548)*	*11*	*16,985*
Provisions recognised as liabilities					
Provisions for commitments	775	45		(2)	818
Other provisions	417	50	(32)	(19)	416
Total provisions recognised for credit commitments	**1,192**	**95**	**(32)**	**(21)**	**1,234**
of which stage 1	*237*	*22*		*-*	*259*
of which stage 2	*220*	*5*			*225*
of which stage 3	*735*	*68*	*(32)*	*(21)*	*750*
TOTAL IMPAIRMENT AND PROVISIONS	**25,980**	**2,649**	**(5,592)**	**3**	**23,040**

Change in impairment by accounting category and asset type during the previous period

In millions of euros	1 January 2018 *IFRS9 & IFRS15*	Net allowance to impairment	Impairment provisions used	Effect of exchange rate movements and other	31 December 2018 *IFRS9 & IFRS15*
Assets impairment					
Amounts due from central banks	13	5	-	(3)	15
Financial instruments at fair value through profit or loss	190	(41)	-	42	191
Impairment of assets at fair value through equity	131	12	(1)	(2)	140
Financial assets at amotised cost	27,658	2,527	(5,637)	(186)	24,362
Loans and receivables	*27,556*	*2,489*	*(5,626)*	*(187)*	*24,232*
Debt securities	*102*	*38*	*(11)*	*1*	*130*
Other assets	75	4	(1)	2	80
Total impairment of financial assets	**28,067**	**2,507**	**(5,639)**	**(147)**	**24,788**
of which stage 1	*1,477*	*145*	*(2)*	*(39)*	*1,581*
of which stage 2	*3,707*	*(291)*	*(12)*	*(79)*	*3,325*
of which stage 3	*22,883*	*2,653*	*(5,625)*	*(29)*	*19,882*
Provisions recognised as liabilities					
Provisions for commitments	763	(9)	(66)	87	775
Other provisions	514	(8)	(50)	(39)	417
Total provisions recognised for credit commitments	**1,277**	**(17)**	**(116)**	**48**	**1,192**
of which stage 1	*201*	*10*	*(1)*	*27*	*237*
of which stage 2	*265*	*(49)*	*-*	*4*	*220*
of which stage 3	*811*	*22*	*(115)*	*17*	*735*
TOTAL IMPAIRMENT AND PROVISIONS	**29,344**	**2,490**	**(5,755)**	**(99)**	**25,980**

Change in impairment of amortised cost financial assets during the period

In millions of euros	Impairment on assets subject to 12-month Expected Credit Losses (Stage 1)	Impairment on assets subject to lifetime Expected Credit Losses (Stage 2)	Impairment on doubtful assets (Stage 3)	Total
AT 31 DECEMBER 2018	**1,549**	**3,302**	**19,511**	**24,362**
Net allowance to impairment	**123**	**(208)**	**2,667**	**2,582**
Financial assets purchased or originated during the period	580	369	3	952
Financial assets derecognised during the period[1]	(263)	(483)	(809)	(1,555)
Transfer to stage 2	(148)	2,130	(476)	1,506
Transfer to stage 3	(17)	(873)	2,267	1,377
Transfer to stage 1	150	(1,039)	(79)	(968)
Other allowances/reversals without stage transfer[2]	(179)	(312)	1,761	1,270
Impairment provisions used	**(2)**	**(9)**	**(5,549)**	**(5,560)**
Effect of exchange rate movements and other items	**(29)**	**38**	**18**	**27**
AT 31 DECEMBER 2019	**1,641**	**3,123**	**16,647**	**21,411**

(1) Including disposals.
(2) Including amortisation.

Change in impairment of amortised cost financial assets during the previous period

In millions of euros *IFRS9 & IFRS15*	Impairment on assets subject to 12-month Expected Credit Losses (Stage 1)	Impairment on assets subject to lifetime Expected Credit Losses (Stage 2)	Impairment on doubtful assets (Stage 3)	Total
AT 1 JANUARY 2018	**1,445**	**3,691**	**22,522**	**27,658**
Net allowance to impairment	**142**	**(300)**	**2,685**	**2,527**
Financial assets purchased or originated during the period	578	348	-	926
Financial assets derecognised during the period(1)	(179)	(278)	(334)	(791)
Transfer to stage 2	(133)	1,687	(415)	1,139
Transfer to stage 3	(68)	(676)	2,104	1,360
Transfer to stage 1	111	(667)	(98)	(654)
Other allowances/reversals without stage transfer(2)	(167)	(714)	1,428	547
Impairment provisions used	**(2)**	**(12)**	**(5,623)**	**(5,637)**
Effect of exchange rate movements and other items	**(36)**	**(77)**	**(73)**	**(186)**
AT 31 DECEMBER 2018	**1,549**	**3,302**	**19,511**	**24,362**

(1) Including disposals.
(2) Including amortisation.

3.i CORPORATE INCOME TAX

Reconciliation of the effective tax expense to the theoretical tax expense at standard tax rate in France	Year to 31 Dec. 2019		Year to 31 Dec. 2018	
	In millions of euros	tax rate	In millions of euros	tax rate
Corporate income tax expense on pre-tax income at standard tax rate in France(1)	**(4,003)**	**34.4%**	**(3,280)**	**34.4%**
Impact of differently taxed foreign profits	541	-4.7%	456	-4.8%
Impact of changes in tax rates	77	-0.7%		
Impact of the securities taxation	571	-4.9%	362	-3.8%
Impact of the non-deductibility of taxes and bank levies(2)	(218)	1.9%	(209)	2.2%
Impact of previously unrecognised deferred taxes (tax losses and temporary differences)	76	-0.7%	86	-0.9%
Impact of using tax losses for which no deferred tax asset was previously recognised	4	-	-	-
Other items	141	-1.1%	382	-4.0%
Corporate income tax expense	**(2,811)**	**24.2%**	**(2,203)**	**23.1%**
Current tax expense for the year to 31 December	*(2,615)*		*(1,691)*	
Deferred tax expense for the year to 31 December (note 5.k)	*(196)*		*(512)*	

(1) Restated for the share of profits in equity-method entities and goodwill impairment.
(2) Contribution to the Single Resolution Fund and non-deductible systemic bank levies.

Note 4 SEGMENT INFORMATION

The Group is composed of two operating divisions:

- Retail Banking and Services, which covers Domestic Markets and International Financial Services. Domestic Markets include Retail Banking networks in France (FRB), Italy (BNL banca commerciale), Belgium (BRB), and Luxembourg (LRB), as well as certain specialised Retail Banking divisions (Personal Investors, Leasing Solutions, Arval and New Digital Businesses). International Financial Services is composed of all BNP Paribas Group Retail Banking businesses out of the Eurozone, split between Europe Mediterranean and BancWest in the United States, as well as Personal Finance and the Insurance and Wealth and Asset Management activities (Wealth Management, Asset Management and Real Estate);
- Corporate and Institutional Banking (CIB), which includes Corporate Banking (Europe, Middle East, Africa, Asia, Americas, and Corporate Finance activities), Global Markets (Fixed Income, Currency and Commodities, as well as Equity and Prime Services), and Securities Services to management companies, financial institutions and other corporations.

Other activities mainly include Principal Investments, activities related to the Group's central treasury function, some costs related to cross-business projects, the residential mortgage lending business of Personal Finance (a significant part of which is managed in run-off), and certain investments.

They also include non-recurring items resulting from applying the rules on business combinations. In order to provide consistent and relevant economic information for each core business, the impact of amortising fair value adjustments recognised in the net equity of entities acquired and restructuring costs incurred in respect to the integration of entities, have been allocated to the "Other Activities" segment. The same applies to transformation costs relating to the Group's cross-business savings programmes.

Inter-segment transactions are conducted at arm's length. The segment information presented comprises agreed inter-segment transfer prices.

The capital allocation is carried out on the basis of risk exposure, taking into account various conventions relating primarily to the capital requirement of the business as derived from the risk-weighted asset calculations required under capital adequacy rules. Normalised equity income by segment is determined by attributing to each segment the income of its allocated equity. The equity allocation to segments is based on 11% of weighted assets. The breakdown of balance sheet by core business follows the same rules as the breakdown of the profit or loss by core business.

In order to be comparable with 2019, the segment information for 2018 has been restated of the following main effects as if these had occurred on 1st January 2018.

1. Following the sale in 2018 of 43.6% of First Hawaiian Bank (FHB), the entity was no longer fully consolidated as from 1st August 2018 and was accounted according to the IFRS 5 standard as assets held for sale. It had been booked under the Corporate Centre from 1st October 2018. As a reminder, the remaining stake has been entirely sold on 25th January 2019.

   FHB's contribution to Group results has been retroactively reallocated to the Corporate Centre from 1st January 2018, including the capital gain from the sale of FHB shares which was initially allocated to BancWest.
2. The internal transfer of Correspondent Banking activities has been made within CIB from Corporate Banking to Securities Services to reflect the organisational change.

These changes do not affect Group results as a whole but only the analytical breakdown of IFS (BancWest), CIB (Corporate Banking, Securities Services), and Corporate Centre.

INCOME BY BUSINESS SEGMENT

In millions of euros	Year to 31 Dec. 2019						Year to 31 Dec. 2018					
	Revenues	Operating expenses	Cost of risk	Operating income	Non-operating items	Pre-tax income	Revenues	Operating expenses	Cost of risk	Operating income	Non-operating items	Pre-tax income
Retail Banking & Services												
Domestic Markets												
French Retail Banking(1)	**6,050**	(4,461)	(324)	**1,266**	7	**1,273**	**6,035**	(4,463)	(286)	**1,285**	(1)	**1,284**
BNL banca commerciale(1)	**2,690**	(1,753)	(490)	**447**	(5)	**443**	**2,704**	(1,752)	(593)	**359**	(3)	**356**
Belgian Retail Banking(1)	**3,353**	(2,378)	(56)	**919**	10	**929**	**3,422**	(2,418)	(42)	**961**	18	**980**
Other Domestic Markets activities(1)	**3,169**	(1,847)	(146)	**1,175**	(10)	**1,165**	**2,972**	(1,768)	(123)	**1,081**	(17)	**1,064**
International Financial Services												
Personal Finance	**5,796**	(2,857)	(1,354)	**1,585**	18	**1,602**	**5,533**	(2,764)	(1,186)	**1,583**	64	**1,646**
International Retail Banking												
Europe-Mediterranean(1)	**2,690**	*(1,794)*	*(399)*	**497**	*231*	**728**	**2,351**	*(1,600)*	*(308)*	**443**	*241*	**684**
BancWest(1)	**2,309**	*(1,674)*	*(148)*	**487**	*(3)*	**484**	**2,226**	*(1,647)*	*(70)*	**510**	*2*	**512**
Insurance	**3,068**	(1,500)	(3)	**1,564**	152	**1,716**	**2,680**	(1,406)	3	**1,276**	203	**1,479**
Wealth and Asset Management	**3,320**	(2,682)	(6)	**632**	63	**695**	**3,286**	(2,636)	(6)	**644**	37	**681**
Corporate & Institutional Banking												
Corporate Banking	**4,312**	(2,599)	(223)	**1,490**	13	**1,503**	**3,923**	(2,493)	(32)	**1,399**	57	**1,456**
Global Markets	**5,571**	(4,231)	2	**1,341**	(6)	**1,334**	**4,727**	(3,937)	(19)	**771**	1	**772**
Securities Services	**2,198**	(1,833)	4	**369**		**370**	**2,179**	(1,733)	8	**453**		**454**
Other Activities	**71**	(1,728)	(58)	**(1,715)**	867	**(848)**	**479**	(1,965)	(110)	**(1,596)**	437	**(1,159)**
TOTAL GROUP	**44,597**	**(31,337)**	**(3,203)**	**10,057**	**1,337**	**11,394**	**42,516**	**(30,583)**	**(2,764)**	**9,169**	**1,039**	**10,208**

(1) *French Retail Banking, BNL banca commerciale, Belgian Retail Banking, Luxembourg Retail Banking, Europe-Mediterranean and BancWest after the reallocation within Wealth and Asset Management of one-third of the Wealth Management activities in France, Italy, Belgium, Luxembourg, Germany, Turkey and the United States.*

NET COMMISSION INCOME BY BUSINESS SEGMENT, INCLUDING FEES ACCOUNTED FOR UNDER "NET INCOME FROM INSURANCE ACTIVITIES"

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Retail Banking & Services		
Domestic Markets		
French Retail Banking[(1)]	2,558	2,573
BNL banca commerciale[(1)]	1,025	1,038
Belgian Retail Banking[(1)]	813	801
Other Domestic Markets activities[(1)]	376	362
International Financial Services		
Personal Finance	799	736
International Retail Banking	880	936
Europe Mediterranean[(1)]	*578*	*510*
BancWest[(1)]	*302*	*427*
Insurance	(3,448)	(3,400)
Wealth and Asset Management	2,207	2,192
Corporate & Institutional Banking		
Corporate Banking	1,545	1,441
Global Markets	(790)	(718)
Securities Services	1,309	1,240
Other activities	**48**	**8**
TOTAL GROUP	**7,323**	**7,208**

(1) *French Retail Banking, BNL banca commerciale, Belgian Retail Banking, Luxembourg Retail Banking, Europe-Mediterranean and BancWest after the reallocation within Wealth and Asset Management of one-third of the Wealth Management activities in France, Italy, Belgium, Luxembourg, Germany, Turkey and the United States.*

ASSETS AND LIABILITIES BY BUSINESS SEGMENT

	31 December 2019		31 December 2018	
In millions of euros	Asset	Liability	Asset	Liability
Retail Banking & Services				
Domestic Markets	480,313	498,948	465,519	472,763
French Retail Banking	195,462	198,097	193,865	188,781
BNL banca commerciale	81,276	69,821	80,709	65,844
Belgian Retail Banking	140,127	173,097	133,540	162,186
Other Domestic Markets activities	63,448	57,933	57,405	55,952
International Financial Services	520,772	456,074	475,517	420,869
Personal Finance	93,526	22,133	86,178	18,675
International Retail Banking	136,714	124,774	129,455	116,373
Europe-Mediterranean	*58,901*	*53,642*	*57,674*	*51,712*
BancWest	*77,813*	*71,132*	*71,781*	*64,661*
Insurance	258,175	240,061	232,308	222,021
Wealth and Asset Management	32,714	69,106	27,576	63,800
Corporate and Institutional Banking	**891,207**	**958,488**	**816,190**	**907,655**
Other Activities	**272,064**	**251,203**	**283,610**	**239,549**
TOTAL GROUP	**2,164,713**	**2,164,713**	**2,040,836**	**2,040,836**

Information by business segment relating to goodwill is presented in note 5.o Goodwill.

Information by geographic area

The geographic split of segment results, assets and liabilities is based on the region in which they are recognised for accounting purposes, adjusted as per the managerial origin of the business activity. It does not necessarily reflect the counterparty's nationality or the location of operational businesses.

REVENUES BY GEOGRAPHIC AREA

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Europe	33,495	31,699
North America	4,664	4,654
Asia & Pacific	3,210	3,000
Others	3,228	3,163
TOTAL GROUP	**44,597**	**42,516**

ASSETS AND LIABILITIES, IN CONTRIBUTION TO THE CONSOLIDATED ACCOUNTS, BY GEOGRAPHIC AREA

In millions of euros	31 December 2019	31 December 2018
Europe	1,722,658	1,618,039
North America	256,269	246,419
Asia & Pacific	133,403	126,595
Others	52,383	49,783
TOTAL GROUP	**2,164,713**	**2,040,836**

Note 5 NOTES TO THE BALANCE SHEET AT 31 DECEMBER 2019

5.a FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets and liabilities at fair value through profit or loss

Financial assets and financial liabilities at fair value through profit or loss consist of held-for-trading transactions – including derivatives –, of certain liabilities designated by the Group as at fair value through profit or loss at the time of issuance and of non-trading instruments which characteristics prevent their accounting at amortised cost or at fair value through equity.

In millions of euros	31 December 2019				31 December 2018			
	Financial instruments held for trading	Financial instruments designated as at fair value through profit or loss	Other financial assets at fair value through profit or loss	Total	Financial instruments held for trading	Financial instruments designated as at fair value through profit or loss	Other financial assets at fair value through profit or loss	Total
Securities	124,224		7,711	131,935	114,615		7,339	121,954
Loans and repurchase agreements	195,554		1,373	196,927	182,463		1,253	183,716
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	**319,778**	**-**	**9,084**	**328,862**	**297,078**	**-**	**8,592**	**305,670**
Securities	65,490			65,490	75,189			75,189
Deposits and repurchase agreements	212,712	2,381		215,093	201,705	2,334		204,039
Issued debt securities (note 5.h)		63,758		63,758		54,908		54,908
of which subordinated debt		*893*		*893*		*787*		*787*
of which non subordinated debt		*56,636*		*56,636*		*48,964*		*48,964*
of which debt representative of shares of consolidated funds held by third parties		*6,229*		*6,229*		*5,157*		*5,157*
FINANCIAL LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS	**278,202**	**66,139**		**344,341**	**276,894**	**57,242**		**334,136**

Detail of these assets and liabilities is provided in note 5.d.

Financial liabilities designated as at fair value through profit or loss

Financial liabilities at fair value through profit or loss mainly consist of issued debt securities, originated and structured on behalf of customers, where the risk exposure is managed in combination with the hedging strategy. These types of issued debt securities contain significant embedded derivatives, which changes in value may be compensated by changes in the value of economic hedging derivatives.

The redemption value of debt issued and designated as at fair value through profit or loss at 31 December 2019 was EUR 58,729 million (EUR 56,435 million at 31 December 2018).

Other financial assets measured at fair value through profit or loss

Other financial assets at fair value through profit or loss are financial assets not held for trading:

- debt instruments that do not meet the criteria defined by IFRS 9 to be classified as financial instruments at "fair value through equity" or at "amortised cost":
  - their business model is not to "collect contractual cash flows" nor "collect contractual cash flows and sell the instruments", and/or
  - their cash flows are not solely repayments of principal and interest on the principal amount outstanding;
- equity instruments that the Group did not choose to classify as at "fair value through equity".

Derivative financial instruments

The majority of derivative financial instruments held for trading are related to transactions initiated for trading purposes. They may result from market-making or arbitrage activities. BNP Paribas actively trades in derivatives. Transactions include trades in "ordinary" instruments such as credit default swaps, and structured transactions with complex risk profiles tailored to meet the needs of its customers. The net position is in all cases subject to limits.

Some derivative instruments are also contracted to hedge financial assets or financial liabilities for which the Group has not documented a hedging relationship, or which do not qualify for hedge accounting under IFRS.

In millions of euros	31 December 2019		31 December 2018	
	Positive market value	Negative market value	Positive market value	Negative market value
Interest rate derivatives	148,157	130,411	116,438	103,452
Foreign exchange derivatives	60,172	57,758	69,514	68,761
Credit derivatives	8,659	9,242	6,873	7,071
Equity derivatives	25,480	35,841	33,424	39,419
Other derivatives	4,819	4,633	6,646	7,101
DERIVATIVE FINANCIAL INSTRUMENTS	**247,287**	**237,885**	**232,895**	**225,804**

The table below shows the total notional amount of trading derivatives. The notional amounts of derivative instruments are merely an indication of the volume of the Group's activities in financial instruments markets, and do not reflect the market risks associated with such instruments.

In millions of euros	31 December 2019				31 December 2018			
	Exchange-traded	Over-the-counter, cleared through central clearing houses	Over-the-counter	Total	Exchange-traded	Over-the-counter, cleared through central clearing houses	Over-the-counter	Total
Interest rate derivatives	1,275,283	8,554,782	5,224,422	15,054,487	1,553,933	9,189,930	5,193,522	15,937,385
Foreign exchange derivatives	17,125	71,944	4,989,986	5,079,055	15,547	52,329	4,782,027	4,849,903
Credit derivatives		348,880	591,827	940,707		311,726	561,534	873,260
Equity derivatives	788,587		592,450	1,381,037	1,132,800	1,789	577,816	1,712,405
Other derivatives	151,049		85,006	236,055	99,510	58,004	94,202	251,716
DERIVATIVE FINANCIAL INSTRUMENTS	**2,232,044**	**8,975,606**	**11,483,691**	**22,691,341**	**2,801,790**	**9,613,778**	**11,209,101**	**23,624,669**

In the framework of its client clearing activity, the Group guarantees the risk of default of its clients to central counterparties.

The corresponding notional amount is EUR 936 billion as of 31 December 2019.

5.b DERIVATIVES USED FOR HEDGING PURPOSES

The table below shows the notional amounts and the fair value of derivatives used for hedging purposes.

In millions of euros	31 December 2019			31 December 2018		
	Notional amounts	Positive fair value	Negative fair value	Notional amounts	Positive fair value	Negative fair value
Fair value hedges	**741,647**	**10,702**	**13,113**	**639,707**	**8,079**	**10,706**
Interest rate derivatives	732,683	10,583	12,964	630,993	7,871	10,526
Foreign exchange derivatives	8,964	119	149	8,714	208	180
Cash flow hedges	**179,237**	**1,744**	**984**	**184,287**	**1,683**	**964**
Interest rate derivatives	67,143	1,476	340	58,666	1,233	358
Foreign exchange derivatives	111,773	236	613	125,306	439	496
Other derivatives	321	32	31	315	11	110
Net foreign investment hedges	**4,863**	**6**	**19**	**3,806**	**48**	**7**
Foreign exchange derivatives	4,863	6	19	3,806	48	7
DERIVATIVES USED FOR HEDGING PURPOSES	**925,747**	**12,452**	**14,116**	**827,800**	**9,810**	**11,677**

Interest rate risk and foreign exchange risk management strategies are described in chapter 5 – Pillar 3 of the Universal registration document (section 5.7 – *Market risk – Market risk related to banking activities*). Quantitative information related to foreign currency borrowings used for net investment hedges is also mentioned in this chapter.

The table below presents the detail of fair value hedge relationships for identified financial instruments and portfolios of financial instruments that are continuing as at 31 December 2019:

In millions of euros, as at 31 December 2019	Hedging instruments				Hedged instruments			
	Notional amounts	Positive fair value	Negative fair value	Cumulated changes in fair value used as the basis for recognising ineffec-tiveness	Carrying amount – asset	Cumulated changes in fair value – asset	Carrying amount – liability	Cumulated changes in fair value – liability
Fair value hedges of identified instruments	**250,198**	**4,249**	**6,825**	**(322)**	**112,836**	**3,442**	**104,315**	**3,310**
Interest rate derivatives hedging the interest rate risk related to	**242,612**	**4,170**	**6,697**	**(358)**	**110,439**	**3,443**	**98,717**	**3,267**
Loans and receivables	24,185	66	591	(601)	24,268	602	-	-
Securities	91,644	1,116	5,746	(2,940)	86,171	2,841	-	-
Deposits	17,291	929	(36)	629	-	-	17,793	685
Debt securities	109,492	2,059	396	2,554	-	-	80,924	2,582
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**7,586**	**79**	**128**	**36**	**2,397**	**(1)**	**5,598**	**43**
Loans and receivables	1,380	-	1	(2)	1,278	1	-	-
Securities	1,036	14	11	(3)	1,119	(2)	-	-
Deposits	594	20	35	(28)	-	-	457	(27)
Debt securities	4,576	45	81	69	-	-	5,141	70
Interest-rate risk hedged portfolios	**491,449**	**6,453**	**6,288**	**(302)**	**133,606**	**4,255**	**170,673**	**3,940**
Interest rate derivatives hedging the interest rate risk related to(1)	**490,071**	**6,413**	**6,267**	**(279)**	**132,342**	**4,229**	**170,673**	**3,940**
Loans and receivables	223,102	762	5,326	(4,538)	132,342	4,229	-	-
Deposits	266,969	5,651	941	4,259	-	-	170,673	3,940
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**1,378**	**40**	**21**	**(23)**	**1,264**	**26**	**-**	**-**
Loans and receivables	1,378	40	21	(23)	1,264	26	-	-
TOTAL FAIR VALUE HEDGE	**741,647**	**10,702**	**13,113**	**(624)**	**246,442**	**7,697**	**274,988**	**7,250**

(1) Are included in this section the notional amounts of hedging derivatives and of swaps that reverse the interest rate positions, thus reducing the hedge relationship, when the hedged item still exists, for respectively EUR 69,179 million for derivatives hedging loans and receivables and EUR 81,351 million for derivatives hedging deposits.

In millions of euros, as at 31 December 2018	Hedging instruments				Hedged instruments			
	Notional amounts	Positive fair value	Negative fair value	Cumulated changes in fair value used as the basis for recognising ineffec-tiveness	Carrying amount - asset	Cumulated changes in fair value - asset	Carrying amount - liability	Cumulated changes in fair value - liability
Fair value hedges of identified instruments	**203,795**	**3,150**	**5,702**	**(1,152)**	**94,412**	**3,131**	**91,100**	**2,323**
Interest rate derivatives hedging the interest rate risk related to	**196,753**	**3,070**	**5,543**	**(1,214)**	**93,045**	**3,116**	**85,948**	**2,253**
Loans and receivables	27,345	82	427	(385)	24,727	415	-	-
Securities	68,129	765	5,006	(2,843)	68,318	2,701	-	-
Deposits	16,155	831	18	823	-	-	16,327	820
Debt securities	85,124	1,392	92	1,191	-	-	69,621	1,433
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**7,042**	**80**	**159**	**62**	**1,367**	**15**	**5,152**	**70**
Loans and receivables	1,270	125	12	(6)	1,270	12	-	-
Securities	100	1	6	(3)	97	3	-	-
Deposits	626	(16)	-	20	-	-	465	17
Debt securities	5,046	(30)	141	51	-	-	4,687	53
Interest-rate risk hedged portfolios	**435,912**	**4,929**	**5,004**	**(419)**	**90,299**	**2,781**	**154,412**	**2,458**
Interest rate derivatives hedging the interest rate risk related to(1)	**434,240**	**4,801**	**4,983**	**(429)**	**88,789**	**2,792**	**154,412**	**2,458**
Loans and receivables	188,047	756	4,259	(2,941)	88,644	2,792	-	-
Securities	148	3	7	(2)	145	-	-	-
Deposits	246,045	4,042	717	2,514	-	-	154,412	2,458
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**1,672**	**128**	**21**	**10**	**1,510**	**(11)**	**-**	**-**
Loans and receivables	1,672	128	21	10	1,510	(11)	-	-
TOTAL FAIR VALUE HEDGE	**639,707**	**8,079**	**10,706**	**(1,571)**	**184,711**	**5,912**	**245,512**	**4,781**

(1) Are included in this section the notional amounts of hedging derivatives and of swaps that reverse the interest rate positions, thus reducing the hedge relationship, when the hedged item still exists, for respectively EUR 75,126 million for derivatives hedging loans and receivables and EUR 61,689 million for derivatives hedging deposits.

An asset or a liability or set of assets and liabilities, can be hedged over several periods of time with different derivative financial instruments. Besides, some hedges are achieved by the combination of two derivative instruments (for example, to exchange the variable rate index of the first instrument from Euribor to Eonia). In this case, the notional amounts add up and their total amount is higher than the hedged amount. The first situation is observed more particularly for interest rate risk hedged portfolios and the second for hedges of issued debt securities.

As regards discontinued fair value hedge relationships where the derivative contract was terminated, the cumulated amount of hedging instruments revaluation remaining to be amortised over the residual life of the hedged instruments amounts to EUR 47 million in assets as at 31 December 2019, and to EUR 49 million in liabilities, for hedges of portfolios of financial instruments. At 31 December 2018, these amounts were EUR 6 million in assets and 12 million in liabilities.

The notional amount of cash flow hedge derivatives is EUR 179,237 million as at 31 December 2019. Changes in assets and liabilities recognised directly in equity amount to EUR 1,416 million. At 31 December 2018, the notional amount of cash flow hedge derivatives was EUR 184,287 million and the changes in assets and liabilities recognised directly in equity amount was EUR 1,073 million.

The table below presents the nominal amounts of hedging derivatives by maturity:

In millions of euros, as at 31 December 2019	Maturity date			
	Less than 1 year	Between 1 and 5 years	Over 5 years	Total
Fair value hedges	**160,731**	**330,600**	**250,316**	**741,647**
Interest rate derivatives	157,154	326,038	249,491	732,683
Foreign exchange derivatives	3,577	4,562	825	8,964
Cash flow hedges	**116,676**	**38,757**	**23,804**	**179,237**
Interest rate derivatives	18,330	30,475	18,338	67,143
Foreign exchange derivatives	98,205	8,102	5,466	111,773
Other derivatives	141	180		321
Net foreign investment hedges	**4,156**	**617**	**90**	**4,863**
Foreign exchange derivatives	4,156	617	90	4,863

The table below presents the nominal amounts of hedging derivatives by maturity at the previous period:

In millions of euros, as at 31 December 2018	Maturity date			
	Less than 1 year	Between 1 and 5 years	Over 5 years	Total
Fair value hedges	**121,642**	**327,622**	**190,443**	**639,707**
Interest rate derivatives	118,626	323,278	189,089	630,993
Foreign exchange derivatives	3,016	4,344	1,354	8,714
Cash flow hedges	**121,760**	**44,703**	**17,824**	**184,287**
Interest rate derivatives	8,456	37,884	12,326	58,666
Foreign exchange derivatives	113,165	6,643	5,498	125,306
Other derivatives	139	176		315
Net foreign investment hedges	**1,369**	**2,437**	**-**	**3,806**
Foreign exchange derivatives	1,369	2,437	-	3,806

5.c FINANCIAL ASSETS AT FAIR VALUE THROUGH EQUITY

In millions of euros	31 December 2019		31 December 2018	
	Fair value	of which changes in value taken directly to equity	Fair value	of which changes in value taken directly to equity
Debt securities	**50,403**	**161**	**53,838**	**77**
Governments	29,820	176	32,818	243
Other public administrations	13,782	68	14,340	(74)
Credit institutions	4,323	(80)	4,149	(83)
Others	2,478	(3)	2,531	(9)
Equity securities	**2,266**	**565**	**2,151**	**451**
TOTAL FINANCIAL ASSETS AT FAIR VALUE THROUGH EQUITY	**52,669**	**726**	**55,989**	**528**

Debt securities at fair value through equity include EUR 117 million classified as stage 3 at 31 December 2019 (EUR 114 million at 31 December 2018). For these securities, the credit impairment recognised in the profit and loss account has been charged to the negative changes in value recognized in equity for EUR 113 million at 31 December 2019 (EUR 112 million at 31 December 2018).

The option to recognise certain equity instruments at fair value through equity was retained in particular for shares held through strategic partnerships and shares that the Group is required to hold in order to carry out certain activities.

During the year ended 31 December 2019, the Group did not sell any of these investments and no unrealised gains or losses were transferred to "retained earnings".

5.d MEASUREMENT OF THE FAIR VALUE OF FINANCIAL INSTRUMENTS

Valuation process

BNP Paribas has retained the fundamental principle that it should have a unique and integrated processing chain for producing and controlling the valuations of financial instruments that are used for the purpose of daily risk management and financial reporting. All these processes are based on a common economic valuation which is a core component of business decisions and risk management strategies.

Economic value is composed of mid-market value, to which add valuation adjustments.

Mid-market value is derived from external data or valuation techniques that maximise the use of observable and market-based data. Mid-market value is a theoretical additive value which does not take account of i) the direction of the transaction or its impact on the existing risks in the portfolio, ii) the nature of the counterparties, and iii) the aversion of a market participant to particular risks inherent in the instrument, the market in which it is traded, or the risk management strategy.

Valuation adjustments take into account valuation uncertainty and include market and credit risk premiums to reflect costs that could be incurred in case of an exit transaction in the principal market.

Fair value generally equals the economic value, subject to limited adjustments, such as own credit adjustments, which are specifically required by IFRS standards.

The main valuation adjustments are presented in the section below.

Valuation adjustments

Valuation adjustments retained by BNP Paribas for determining fair values are as follows:

Bid/offer adjustments: the bid/offer range reflects the additional exit cost for a price taker and symmetrically the compensation sought by dealers to bear the risk of holding the position or closing it out by accepting another dealer's price.

BNP Paribas assumes that the best estimate of an exit price is the bid or offer price, unless there is evidence that another point in the bid/offer range would provide a more representative exit price.

Input uncertainty adjustments: when the observation of prices or data inputs required by valuation techniques is difficult or irregular, an uncertainty exists on the exit price. There are several ways to gauge the degree of uncertainty on the exit price such as measuring the dispersion of the available price indications or estimating the possible ranges of the inputs to a valuation technique.

Model uncertainty adjustments: these relate to situations where valuation uncertainty is due to the valuation technique used, even though observable inputs might be available. This situation arises when the risks inherent in the instruments are different from those available in the observable data, and therefore the valuation technique involves assumptions that cannot be easily corroborated.

Credit valuation adjustment (CVA): the CVA adjustment applies to valuations and market quotations whereby the credit worthiness of the counterparty is not reflected. It aims to account for the possibility that the counterparty may default and that BNP Paribas may not receive the full fair value of the transactions.

In determining the cost of exiting or transferring counterparty risk exposures, the relevant market is deemed to be an inter-dealer market. However, the determination of CVA remains judgemental due to:

- the possible absence or lack of price discovery in the inter-dealer market;
- the influence of the regulatory landscape relating to counterparty risk on the market participants' pricing behaviour; and
- the absence of a dominant business model for managing counterparty risk.

The CVA model is grounded on the same exposures as those used for regulatory purposes. The model attempts to estimate the cost of an optimal risk management strategy based on i) implicit incentives and constraints inherent in the regulations in force and their evolutions, ii) market perception of the probability of default and iii) default parameters used for regulatory purposes.

Funding valuation adjustment (FVA): when valuation techniques are used for the purpose of deriving fair value, funding assumptions related to the future expected cash flows are an integral part of the mid-market valuation, notably through the use of appropriate discount rates. These assumptions reflect what the Bank anticipates as being the effective funding conditions of the instrument that a market participant would consider. This notably takes into account the existence and terms of any collateral agreement. In particular, for non- or imperfectly collateralized derivative instruments, they include an explicit adjustment to the interbank interest rate.

Own-credit valuation adjustment for debts (OCA) and for derivatives (debit valuation adjustment – DVA): OCA and DVA are adjustments reflecting the effect of credit worthiness of BNP Paribas, on respectively the value of debt securities designated as at fair value through profit or loss and derivatives. Both adjustments are based on the expected future liability profiles of such instruments. The own credit worthiness is inferred from the market-based observation of the relevant bond issuance levels. The DVA adjustment is determined after taking into account the Funding Valuation Adjustment (FVA).

Thus, the carrying value of debt securities designated as at fair value though profit or loss is increased by EUR 220 million as at 31 December 2019, compared with an increase in value of EUR 244 million as at 31 December 2018, i.e. a EUR -24 million variation recognised directly in equity that will not be reclassified to profit or loss.

Instrument classes and classification within the fair value hierarchy for assets and liabilities measured at fair value

As explained in the summary of significant accounting policies (note 1.e.10), financial instruments measured at fair value are categorised into a fair value hierarchy consisting of three levels.

The disaggregation of assets and liabilities into risk classes is meant to provide further insight into the nature of the instruments:

- securitised exposures are further broken down by collateral type;
- for derivatives, fair values are broken down by dominant risk factor, namely interest rate, foreign exchange, credit and equity. Derivatives used for hedging purposes are mainly interest rate derivatives.

	31 December 2019											
	Financial instruments held for trading				Instruments at fair value through profit or loss not held for trading				Financial assets at fair value through equity			
In millions of euros	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Securities	**98,940**	**24,927**	**357**	**124,224**	**681**	**2,106**	**4,924**	**7,711**	**32,812**	**18,645**	**1,212**	**52,669**
Governments	46,620	11,027		57,647		245		245	20,627	9,652		30,279
Other debt securities	12,449	13,799	218	26,466		1,283	367	1,650	11,043	8,780	301	20,124
Equities and other equity securities	39,871	101	139	40,111	681	578	4,557	5,816	1,142	213	911	2,266
Loans and repurchase agreements	**-**	**195,420**	**134**	**195,554**	**-**	**514**	**859**	**1,373**	**-**	**-**	**-**	**-**
Loans		3,329		3,329		514	859	1,373				
Repurchase agreements		192,091	134	192,225				-				
FINANCIAL ASSETS AT FAIR VALUE	**98,940**	**220,347**	**491**	**319,778**	**681**	**2,620**	**5,783**	**9,084**	**32,812**	**18,645**	**1,212**	**52,669**
Securities	**62,581**	**2,800**	**109**	**65,490**	**-**	**-**	**-**	**-**				
Governments	41,811	1,265		43,076				-				
Other debt securities	6,294	1,509	31	7,834				-				
Equities and other equity securities	14,476	26	78	14,580				-				
Borrowings and repurchase agreements	**-**	**212,379**	**333**	**212,712**	**-**	**2,202**	**179**	**2,381**				
Borrowings		2,865		2,865		2,202	179	2,381				
Repurchase agreements		209,514	333	209,847				-				
Issued debt securities *(note 5.h)*	**-**	**-**	**-**	**-**	**4,458**	**40,661**	**18,639**	**63,758**				
Subordinated debt *(note 5.h)*				-		893		893				
Non subordinated debt *(note 5.h)*				-		37,997	18,639	56,636				
Debt representative of shares of consolidated funds held by third parties				-	4,458	1,771		6,229				
FINANCIAL LIABILITIES AT FAIR VALUE	**62,581**	**215,179**	**442**	**278,202**	**4,458**	**42,863**	**18,818**	**66,139**				

	31 December 2018											
	Financial instruments held for trading				Instruments at fair value through profit or loss not held for trading				Financial assets at fair value through equity			
In millions of euros	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Securities	**89,253**	**25,121**	**241**	**114,615**	**625**	**1,969**	**4,745**	**7,339**	**43,105**	**11,927**	**957**	**55,989**
Governments	41,404	7,733		49,137	3	246		249	29,905	2,913		32,818
Other debt securities	12,280	15,951	148	28,379		1,185	825	2,010	12,083	8,782	155	21,020
Equities and other equity securities	35,569	1,437	93	37,099	622	538	3,920	5,080	1,117	232	802	2,151
Loans and repurchase agreements	**-**	**182,196**	**267**	**182,463**	**-**	**346**	**907**	**1,253**	**-**	**-**	**-**	**-**
Loans		2,861		2,861		145	907	1,052				
Repurchase agreements		179,335	267	179,602		201		201				
FINANCIAL ASSETS AT FAIR VALUE	**89,253**	**207,317**	**508**	**297,078**	**625**	**2,315**	**5,652**	**8,592**	**43,105**	**11,927**	**957**	**55,989**
Securities	**71,828**	**3,346**	**15**	**75,189**	**-**	**-**	**-**	**-**				
Governments	48,779	631		49,410				-				
Other debt securities	8,394	2,655	11	11,060				-				
Equities and other equity securities	14,655	60	4	14,719				-				
Borrowings and repurchase agreements	**-**	**199,861**	**1,844**	**201,705**	**-**	**1,940**	**394**	**2,334**				
Borrowings		5,408		5,408		1,940	394	2,334				
Repurchase agreements		194,453	1,844	196,297				-				
Issued debt securities *(note 5.h)*	**-**	**-**	**-**	**-**	**4,049**	**36,323**	**14,536**	**54,908**				
Subordinated debt *(note 5.h)*				-		787		787				
Non subordinated debt *(note 5.h)*				-		34,428	14,536	48,964				
Debt representative of shares of consolidated funds held by third parties				-	4,049	1,108		5,157				
FINANCIAL LIABILITIES AT FAIR VALUE	**71,828**	**203,207**	**1,859**	**276,894**	**4,049**	**38,263**	**14,930**	**57,242**				

	31 December 2019							
	Positive market value				Negative market value			
In millions of euros	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Interest rate derivatives	139	146,656	1,362	148,157	132	128,927	1,352	130,411
Foreign exchange derivatives	1	59,948	223	60,172	1	57,518	239	57,758
Credit derivatives		8,400	259	8,659		8,871	371	9,242
Equity derivatives	6,871	17,235	1,374	25,480	7,885	21,327	6,629	35,841
Other derivatives	426	4,140	253	4,819	319	4,079	235	4,633
DERIVATIVE FINANCIAL INSTRUMENTS NOT USED FOR HEDGING PURPOSES	**7,437**	**236,379**	**3,471**	**247,287**	**8,337**	**220,722**	**8,826**	**237,885**
DERIVATIVE FINANCIAL INSTRUMENTS USED FOR HEDGING PURPOSES	**-**	**12,452**	**-**	**12,452**	**-**	**14,116**	**-**	**14,116**

	31 December 2018							
	Positive market value				Negative market value			
In millions of euros	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Interest rate derivatives	158	115,046	1,234	116,438	118	101,967	1,367	103,452
Foreign exchange derivatives	1	69,182	331	69,514	1	68,520	240	68,761
Credit derivatives		6,527	346	6,873		6,616	455	7,071
Equity derivatives	11,724	19,057	2,643	33,424	11,092	22,633	5,694	39,419
Other derivatives	990	5,468	188	6,646	1,133	5,628	340	7,101
DERIVATIVE FINANCIAL INSTRUMENTS NOT USED FOR HEDGING PURPOSES	**12,873**	**215,280**	**4,742**	**232,895**	**12,344**	**205,364**	**8,096**	**225,804**
DERIVATIVE FINANCIAL INSTRUMENTS USED FOR HEDGING PURPOSES	**-**	**9,810**	**-**	**9,810**	**-**	**11,677**	**-**	**11,677**

Transfers between levels may occur when an instrument fulfils the criteria defined, which are generally market and product dependent. The main factors influencing transfers are changes in the observation capabilities, passage of time, and events during the transaction lifetime. The timing of recognising transfers is determined at the beginning of the reporting period.

During the year ended 2019, transfers between Level 1 and Level 2 were not significant.

Description of main instruments in each level

The following section provides a description of the instruments in each level in the hierarchy. It describes notably instruments classified in Level 3 and the associated valuation methodologies.

For main trading book instruments and derivatives classified in Level 3, further quantitative information is provided about the inputs used to derive fair value.

Level 1

This level encompasses all derivatives and securities that are listed on exchanges or quoted continuously in other active markets.

Level 1 includes notably equity securities and liquid bonds, shortselling of these instruments, derivative instruments traded on organised markets (futures, options…). It includes shares of funds and UCITS, for which the net asset value is calculated on a daily basis, as well as debt representative of shares of consolidated funds held by third parties.

Level 2

The Level 2 stock of securities is composed of securities which are less liquid than the Level 1 bonds. They are predominantly government bonds, corporate debt securities, mortgage backed securities, fund shares and short-term securities such as certificates of deposit. They are classified in Level 2 notably when external prices for the same security can be regularly observed from a reasonable number of market makers that are active in this security, but these prices do not represent directly tradable prices. This comprises amongst other, consensus pricing services with a reasonable number of contributors that are active market makers as well as indicative runs from active brokers and/or dealers. Other sources such as primary issuance market, collateral valuation and counterparty collateral valuation matching may also be used where relevant.

Repurchase agreements are classified predominantly in Level 2. The classification is primarily based on the observability and liquidity of the repo market, depending on the underlying collateral and the maturity of the repo transaction.

Debts issued designated as at fair value through profit and loss, are classified in the same level as the one that would apply to the embedded derivative taken individually. The issuance spread is considered observable.

Derivatives classified in Level 2 comprise mainly the following instruments:

- vanilla instruments such as interest rate swaps, caps, floors and swaptions, credit default swaps, equity/foreign exchange (FX)/ commodities forwards and options;
- structured derivatives such as exotic FX options, mono- and multi-underlying equity/funds derivatives, single curve exotic interest rate derivatives and derivatives based on structured rates.

The above derivatives are classified in Level 2 when there is a documented stream of evidence supporting one of the following:

- fair value is predominantly derived from prices or quotations of other Level 1 and Level 2 instruments, through standard market interpolation or stripping techniques whose results are regularly corroborated by real transactions;
- fair value is derived from other standard techniques such as replication or discounted cash flows that are calibrated to observable prices, that bear limited model risk and enable an effective offset of the risks of the instrument through trading Level 1 or Level 2 instruments;
- fair value is derived from more sophisticated or proprietary valuation techniques but is directly evidenced through regular back-testing using external market-based data.

Determining of whether an over-the-counter (OTC) derivative is eligible for Level 2 classification involves judgement. Consideration is given to the origin, transparency and reliability of external data used, and the amount of uncertainty associated with the use of models. It follows that the Level 2 classification criteria involve multiple analysis axis within an "observability zone" whose limits are determined by i) a predetermined list of product categories and ii) the underlying and maturity bands. These criteria are regularly reviewed and updated, together with the applicable valuation adjustments, so that the classification by level remains consistent with the valuation adjustment policy.

Level 3

Level 3 securities of the trading book mainly comprise units of funds and unlisted equity shares measured at fair value through profit or loss or through equity.

Unlisted private equities are systematically classified as Level 3, with the exception of UCITS with a daily net asset value which are classified in the Level 1 of the fair value hierarchy.

Shares and other unlisted variable income securities in level 3 are valued using one of the following methods: a share of revalued net book value, multiples of comparable companies, future cash flows method, multi-criteria approach.

Repurchase agreements: mainly long-term or structured repurchase agreements on corporate bonds and ABSs: The valuation of these transactions requires proprietary methodologies given the bespoke nature of the transactions and the lack of activity and price discovery in the long-term repo market. The curves used in the valuation are corroborated using available data such as the implied basis of the relevant benchmark bond pool, recent long-term repo trade data and price enquiry data. Valuation adjustments applicable to these exposures are commensurate with the degree of uncertainty inherent in the modelling choices and amount of data available.

Debts issued designated as at fair value through profit or loss, are classified in the same level as the one that would apply to the embedded derivative taken individually. The issuance spread is considered observable.

Derivatives

Vanilla derivatives are classified in Level 3 when the exposure is beyond the observation zone for rate curves or volatility surfaces, or relates to less liquid markets such as tranches on old credit index series or emerging markets interest rates markets. The main instruments are:

- ***Interest rate derivatives:*** exposures mainly comprise swap products in less liquid currencies. Classification is driven by the lower liquidity of some maturities, while observation capabilities through consensus may be available. The valuation technique is standard, and uses external market information and extrapolation techniques.
- ***Credit derivatives (CDS):*** exposures mainly comprise CDSs beyond the maximum observable maturity and, to a much lesser extent, CDSs on illiquid or distressed names and CDSs on loan indices. Classification is driven by the lack of liquidity while observation capabilities may be available notably through consensus. Level 3 exposures also comprise CDS and Total Return Swaps (TRS) positions on securitised assets. These are priced along the same modelling techniques as the underlying bonds, taking into consideration the funding basis and specific risk premium.
- ***Equity derivatives:*** exposures essentially comprise long dated forward or volatility products or exposures where there is a limited market for optional products. The marking of the forward curves and volatility surfaces beyond the maximum observable maturity relies on extrapolation techniques. However, when there is no market for model input, volatility or forward is generally determined on the basis of proxy or historical analysis.

  Similarly, long-term transactions on equity baskets are also classified in Level 3, based on the absence of equity correlation observability on long maturities.

These vanilla derivatives are subject to valuation adjustments linked to uncertainty on liquidity, specialised by nature of underlying and liquidity bands.

Structured derivatives classified in Level 3 predominantly comprise structured derivatives of which hybrid products (FX/Interest Rates hybrids, Equity hybrids), credit correlation products, prepayment-sensitive products, some stock basket optional products and some interest rate optional instruments. The main exposures are described below, with insight into the related valuation techniques and on the source of uncertainty:

- ***Structured interest rate options*** are classified in Level 3 when they involve currencies where there is not sufficient observation or when they include a quanto feature where the pay-off is measured with a forex forward fixed rate (except for the main currencies). Long term structured derivatives are also classified in Level 3.
- ***Hybrid FX/Interest rate products*** essentially comprise a specific product family known as Power Reverse Dual Currency (PRDC). When valuation of PRDCs requires sophisticated modelling of joint behaviour of FX and interest rate, and is notably sensitive to the unobservable FX/interest rate correlations, such products are classified as level 3. PRDCs valuations are corroborated with recent trade data and consensus data.
- ***Securitisation swaps*** mainly comprise fixed rate swaps, cross currency or basis swaps whose notional is indexed to the prepayment behaviour of some underlying portfolio. The estimation of the maturity profile of securitisation swaps is corroborated by statistical estimates using external historical data.
- ***Forward volatility options*** are generally products whose pay-off is indexed to the future variability of a rate index such as volatility swaps. These products involve material model risk as it is difficult to infer forward volatility information from the market-traded instruments. The valuation adjustment framework is calibrated to the uncertainty inherent in the product, and to the range of uncertainty from the existing external consensus data.
- ***Inflation derivatives*** classified in Level 3 mainly comprise swap products on inflation indices that are not associated with a liquid indexed bond market, optional products on inflation indices (such as caps and floors) and other forms of inflation indices involving optionality on the inflation indices or on the inflation annual rate. Valuation techniques used for inflation derivatives are predominantly standard market models. Proxy techniques are used for a few limited exposures. Although the valuations are corroborated through monthly consensus data, these products are classified as Level 3 due to their lack of liquidity and some uncertainties inherent in the calibration.
- The valuation of ***bespoke CDOs*** requires correlation of default events. This information is inferred from the active index tranche market through a proprietary projection technique and involves proprietary extrapolation and interpolation techniques. Multi-geography CDOs further require an additional correlation assumption. Finally, the bespoke CDO model also involves proprietary assumptions and parameters related to the dynamic of the recovery factor. CDO modelling, is calibrated on the observable index tranche markets, and is regularly back-tested against consensus data on standardised pools. The uncertainty arises from the model risk associated with the projection and geography mixing technique, and the uncertainty of associated parameters, together with the recovery modelling.
- ***N to Default baskets*** are other forms of credit correlation products, modelled through standard copula techniques. The main inputs required are the pair-wise correlations between the basket components which can be observed in the consensus and the transactions. Linear baskets are considered observable.
- ***Equity and equity-hybrid correlation products*** are instruments whose pay-off is dependent on the joint behaviour of a basket of equities/indices leading to a sensitivity of the fair value measurement to the correlation amongst the basket components. Hybrid versions of these instruments involve baskets that mix equity and non-equity underlyings such as commodity indices, or foreign exchange rates. Only a subset of the Equity/index correlation matrix is regularly observable and traded, while most cross-asset correlations are not active. Therefore, classification in Level 3 depends on the composition of the basket, the maturity, and the hybrid nature of the product. The correlation input is derived from a proprietary model combining historical estimators, and other adjustment factors, that are corroborated by reference to recent trades or external data. The correlation matrix is essentially available from consensus services, and when a correlation between two underlying instruments is not available, it might be obtained from extrapolation or proxy techniques.

These structured derivatives are subject to specific valuation adjustments to cover uncertainties linked to liquidity, parameters and model risk.

Valuation adjustments (CVA, DVA and FVA)

The valuation adjustment for counterparty credit risk (CVA), own-credit risk for derivatives (DVA) and the explicit funding valuation adjustment (FVA) are deemed to be unobservable components of the valuation framework and therefore classified in Level 3. This does not impact, in general cases, the classification of individual transactions into the fair value hierarchy. However, a specific process allows to identify individual deals for which the marginal contribution of these adjustments and related uncertainty is significant. Are particularly concerned some insufficiently collateralized vanilla interest rate instruments with very long residual maturity.

The table below provides the range of values of main unobservable inputs for the valuation of level 3 financial instruments. The ranges displayed correspond to a variety of different underlying instruments and are meaningful only in the context of the valuation technique implemented by BNP Paribas. The weighted averages, where relevant and available, are based on fair values, nominal amounts or sensitivities.

The main unobservable parameters used for the valuation of debt issued in level 3 are equivalent to these of their economic hedge derivative. Information on those derivatives, displayed in the following table, is also applicable to these debts.

Risk classes	Balance Sheet valuation (in millions of euros) Asset	Liability	Main product types composing the Level 3 stock within the risk class	Valuation technique used for the product types considered	Main unobservable inputs for the product types considered	Range of unobservable input across Level 3 population considered	Weighted average
Repurchase agreements	134	333	Long-term repo and reverse-repo agreements	Proxy techniques, based amongst other on the funding basis of a benchmark bond pool, that is actively traded and representative of the repo underlying	Long-term repo spread on private bonds (High Yield, High Grade) and on ABSs	0 pb to 77 pb	47 pb(b)
Interest rate derivatives	1,362	1,352	Hybrid Forex/Interest rates derivatives	Hybrid Forex interest rate option pricing model	Correlation between FX rate and interest rates. Main currency pairs are EUR/JPY, USD/JPY, AUD/JPY	10% to 71%	42%(b)
			Hybrid inflation rates/Interest rates derivatives	Hybrid inflation interest rate option pricing model	Correlation between interest rates and inflation rates mainly in Europe.	5% to 45%	39%
			Floors and caps on inflation rate or on the cumulative inflation (such as redemption floors), predominantly on European and French inflation	Inflation pricing model	Volatility of cumulative inflation	0.7% to 9%	(c)
					Volatility of the year on year inflation rate	0.3% to 1.8%	
			Forward Volatility products such as volatility swaps, mainly in euro	Interest rates option pricing model	Forward volatility of interest rates	0.3% to 0.6%	(c)
			Balance-guaranteed fixed rate, basis or cross currency swaps, predominantly on European collateral pools	Prepayment modelling Discounted cash flows	Constant prepayment rates	1.5% to 18%	4%(b)
Credit Derivatives	259	371	Collateralised Debt Obligations and index tranches for inactive index series	Base correlation projection technique and recovery modelling	Base correlation curve for bespoke portfolios	29% to 79%	(c)
					Inter-regions default cross correlation	80% to 90%	90%(a)
					Recovery rate variance for single name underlyings	0 to 25%	(c)
			N-to-default baskets	Credit default model	Default correlation	50% to 85%	60.8%(b)
			Single name Credit Default Swaps (other than CDS on ABSs and loans indices)	Stripping, extrapolation and interpolation	Credit default spreads beyond observation limit (10 years)	55 pb to 234 pb(1)	217 pb(a)
					Illiquid credit default spread curves (across main tenors)	0 pb to 2.856 bp(2)	110 pb(a)
Equity Derivatives	1,374	6,629	Simple and complex derivatives on multi-underlying baskets on stocks	Various volatility option models	Unobservable equity volatility	0% to 94%(3)	26%(d)
					Unobservable equity correlation	15% to 96%	68%(a)

(1) The upper part of the range relates to a significant balance sheet position on an issuer belonging to the telecommunication sector. The remaining positions relate mainly to sovereign and financial issuers.
(2) The upper bound of the range relates to a financial sector issuer that represents an insignificant portion of the balance sheet (CDSs with illiquid underlying instruments).
(3) The upper part of the range relates to one equity instrument representing a non-material portion of the balance sheet on options with equity underlying instruments. Including these inputs, the upper bound of the range would be around 118%.
(a) Weighting is not based on risks, but on an alternative methodology in relation with the Level 3 instruments (present value or notional).
(b) Weights based on relevant risk axis at portfolio level.
(c) No weighting, since no explicit sensitivity is attributed to these inputs.
(d) Simple averaging.

Table of movements in Level 3 financial instruments

For Level 3 financial instruments, the following movements occurred during the year ended 31 December 2019:

	Financial assets				Financial liabilities		
In millions of euros	Financial instruments at fair value through profit or loss held for trading	Financial instruments at fair value through profit or loss not held for trading	Financial assets at fair value through equity	TOTAL	Financial instruments at fair value through profit or loss held for trading	Financial instruments designated as at fair value through profit or loss	TOTAL
AT 31 DECEMBER 2018	**5,250**	**5,652**	**957**	**11,859**	**(9,955)**	**(14,930)**	**(24,885)**
Purchases	511	1,122	203	**1,836**			-
Issues				-		(5,915)	**(5,915)**
Sales	(580)	(905)	(5)	**(1,490)**	(14)		**(14)**
Settlements[(1)]	(1,032)	19	(52)	**(1,065)**	(2,382)	1,889	**(493)**
Transfers to level 3	465	96	20	**581**	(438)	(796)	**(1,234)**
Transfers from level 3	(715)	(395)	(1)	**(1,111)**	2,052	1,137	**3,189**
Gains (or losses) recognised in profit or loss with respect to transactions expired or terminated during the period	1,270	177		**1,447**	377	307	**684**
Gains (or losses) recognised in profit or loss with respect to unexpired instruments at the end of the period	(1,233)	4		**(1,229)**	1,163	(510)	**653**
Changes in fair value of assets and liabilities recognised directly in equity							
Items related to exchange rate movements	26	13	2	**41**	(71)		**(71)**
Changes in fair value of assets and liabilities recognised in equity			88	**88**			-
AT 31 DECEMBER 2019	**3,962**	**5,783**	**1,212**	**10,957**	**(9,268)**	**(18,818)**	**(28,086)**

(1) For the assets, includes redemptions of principal, interest payments as well as cash inflows and outflows relating to derivatives. For the liabilities, includes principal redemptions, interest payments as well as cash inflows and outflows relating to derivatives the fair value of which is negative.

Transfers out of Level 3 of derivatives at fair value include mainly the update of the observability tenor of certain yield curves, and of market parameters related to repurchase agreements and credit transactions but also the effect of derivatives becoming only or mainly sensitive to observable inputs due to the shortening of their lifetime.

Transfers into Level 3 of instruments at fair value reflect the effect of the regular update of the observability zones, among which the implementation of new quantitative tests during the period.

Transfers have been reflected as if they had taken place at the beginning of the reporting period.

The Level 3 financial instruments may be hedged by other Level 1 and Level 2 instruments, the gains and losses of which are not shown in this table. Consequently, the gains and losses shown in this table are not representative of the gains and losses arising from management of the net risk on all these instruments.

Sensitivity of fair value to reasonably possible changes in level 3 assumptions

The following table summarises those financial assets and financial liabilities classified as Level 3 for which alternative assumptions in one or more of the unobservable inputs would change fair value significantly.

The amounts disclosed are intended to illustrate the range of possible uncertainty inherent to the judgement applied when estimating Level 3 parameters, or when selecting valuation techniques. These amounts reflect valuation uncertainties that prevail at the measurement date, and even though such uncertainties predominantly derive from the portfolio sensitivities that prevailed at that measurement date, they are not predictive or indicative of future movements in fair value, nor do they represent the effect of market stress on the portfolio value.

In estimating sensitivities, BNP Paribas either remeasured the financial instruments using reasonably possible inputs, or applied assumptions based on the valuation adjustment policy.

For the sake of simplicity, the sensitivity on cash instruments that are not relating to securitised instruments was based on a uniform 1% shift in the price. More specific shifts were however calibrated for each class of the Level 3 securitised exposures, based on the possible ranges of the unobservable inputs.

For derivative exposures, the sensitivity measurement is based on the credit valuation adjustment (CVA), the explicit funding valuation adjustment (FVA) and the parameter and model uncertainty adjustments related to Level 3.

Regarding the credit valuation adjustment (CVA) and the explicit funding valuation adjustment (FVA), the uncertainty was calibrated based on prudent valuation adjustments described in the technical standard "Prudent Valuation" published by the European Banking Authority. For other valuation adjustments, two scenarios were considered: a favourable scenario where all or portion of the valuation adjustment is not considered by market participants, and an unfavourable scenario where market participants would require twice the amount of valuation adjustments considered by BNP Paribas for entering into a transaction.

In millions of euros	31 December 2019		31 December 2018	
	Potential impact on income	Potential impact on equity	Potential impact on income	Potential impact on equity
Debt securities	+/-6	+/-3	+/-9	+/-2
Equities and other equity securities	+/-46	+/-9	+/-40	+/-8
Loans and repurchase agreements	+/-11		+/-25	
Derivative financial instruments	+/-621		+/-593	
Interest rate and foreign exchange derivatives	*+/-394*		*+/-365*	
Credit derivatives	*+/-53*		*+/-59*	
Equity derivatives	*+/-171*		*+/-167*	
Other derivatives	*+/-3*		*+/-2*	
SENSITIVITY OF LEVEL 3 FINANCIAL INSTRUMENTS	**+/-684**	**+/-12**	**+/-667**	**+/-10**

Deferred margin on financial instruments measured using techniques developed internally and based on inputs partly unobservable in active markets

Deferred margin on financial instruments ("Day One Profit") primarily concerns the scope of financial instruments eligible for Level 3 and to a lesser extent some financial instruments eligible for level 2 where valuation adjustments for uncertainties regarding parameters or models are more than insignificant compared to the initial margin.

The day one profit is calculated after setting aside valuation adjustments for uncertainties as described previously and released to profit or loss over the expected period for which the inputs will be unobservable. The unamortised amount is included under "Financial instruments at fair value through profit or loss" as a reduction in the fair value of the relevant transactions.

In millions of euros	Deferred margin at 31 December 2018	Deferred margin on transactions during the year	Margin taken to the profit and loss account during the year	Deferred margin at 31 December 2019
Interest rate and foreign exchange derivatives	302	113	(146)	269
Credit derivatives	92	106	(72)	126
Equity derivatives	267	386	(273)	380
Other instruments	13	24	(23)	14
Financial instruments	**674**	**629**	**(514)**	**789**

5.e FINANCIAL ASSETS AT AMORTISED COST

➤ DETAIL OF LOANS AND ADVANCES BY NATURE

In millions of euros	31 December 2019			31 December 2018		
	Gross value	Impairment (note 3.h)	Carrying amount	Gross value	Impairment (note 3.h)	Carrying amount
Loans and advances to credit institutions	**21,793**	**(101)**	**21,692**	**19,707**	**(151)**	**19,556**
On demand accounts	8,002	(13)	7,989	7,234	(17)	7,217
Loans[(1)]	12,697	(88)	12,609	11,628	(134)	11,494
Repurchase agreements	1,094		1,094	845		845
Loans and advances to customers	**826,953**	**(21,176)**	**805,777**	**789,952**	**(24,081)**	**765,871**
On demand accounts	38,978	(3,187)	35,791	41,482	(4,243)	37,239
Loans to customers	751,109	(16,861)	734,248	714,243	(18,681)	695,562
Finance leases	35,653	(1,128)	34,525	33,291	(1,157)	32,134
Repurchase agreements	1,213		1,213	936		936
TOTAL LOANS AND ADVANCES AT AMORTISED COST	**848,746**	**(21,277)**	**827,469**	**809,659**	**(24,232)**	**785,427**

(1) Loans and advances to credit institutions include term deposits made with central banks.

Contractual maturities of finance leases

In millions of euros	31 December 2019	31 December 2018
Gross investment	**37,970**	**35,795**
Receivable within 1 year	*10,412*	*9,525*
Receivable after 1 year but within 5 years	*22,837*	*21,346*
Receivable beyond 5 years	*4,721*	*4,924*
Unearned interest income	**(2,317)**	**(2,504)**
Net investment before impairment	**35,653**	**33,291**
Receivable within 1 year	*9,655*	*8,996*
Receivable after 1 year but within 5 years	*21,685*	*19,672*
Receivable beyond 5 years	*4,313*	*4,623*
Impairment provisions	**(1,128)**	**(1,157)**
Net investment after impairment	**34,525**	**32,134**

➤ DETAIL OF DEBT SECURITIES BY TYPE OF ISSUER

In millions of euros	31 December 2019			31 December 2018		
	Gross value	Impairment (note 3.h)	Carrying amount	Gross value	Impairment (note 3.h)	Carrying amount
Governments	57,743	(21)	57,722	33,254	(16)	33,238
Other public administration	23,794	(3)	23,791	18,534	(3)	18,531
Credit institutions	7,201	(2)	7,199	5,082	(3)	5,079
Others	19,850	(108)	19,742	18,333	(108)	18,225
TOTAL DEBT SECURITIES AT AMORTISED COST	**108,588**	**(134)**	**108,454**	**75,203**	**(130)**	**75,073**

DETAIL OF FINANCIAL ASSETS AT AMORTISED COST BY STAGE

In millions of euros	31 December 2019			31 December 2018		
	Gross Value	Impairment (note 3.h)	Carrying amount	Gross Value	Impairment (note 3.h)	Carrying amount
Loans and advances to credit institutions	**21,793**	**(101)**	**21,692**	**19,707**	**(151)**	**19,556**
Stage 1	21,279	(12)	21,267	19,128	(13)	19,115
Stage 2	418	(5)	413	419	(40)	379
Stage 3	96	(84)	12	160	(98)	62
Loans and advances to customers	**826,953**	**(21,176)**	**805,777**	**789,952**	**(24,081)**	**765,871**
Stage 1	719,160	(1,600)	717,560	668,667	(1,515)	667,152
Stage 2	78,005	(3,100)	74,905	87,328	(3,231)	84,097
Stage 3	29,788	(16,476)	13,312	33,957	(19,335)	14,622
Debt securities	**108,588**	**(134)**	**108,454**	**75,203**	**(130)**	**75,073**
Stage 1	107,630	(30)	107,600	74,240	(21)	74,219
Stage 2	754	(17)	737	769	(31)	738
Stage 3	204	(87)	117	194	(78)	116
Total financial assets at amortised cost	**957,334**	**(21,411)**	**935,923**	**884,862**	**(24,362)**	**860,500**

5.f IMPAIRED FINANCIAL ASSETS (STAGE 3)

The following tables present the carrying amounts of impaired financial assets carried at amortised cost and of impaired financing and guarantee commitments, as well as related collateral and other guarantees.

The amounts shown for collateral and other guarantees correspond to the lower of the value of the collateral or other guarantee and the value of the secured assets.

In millions of euros	31 December 2019			
	Impaired financial assets (Stage 3)			Collateral received
	Gross value	Impairment	Net	
Loans and advances to credit institutions *(note 5.e)*	96	(84)	12	115
Loans and advances to customers *(note 5.e)*	29,788	(16,476)	13,312	8,821
Debt securities at amortised cost *(note 5.e)*	204	(87)	117	45
TOTAL AMORTISED-COST IMPAIRED ASSETS (STAGE 3)	**30,088**	**(16,647)**	**13,441**	**8,981**
Financing commitments given	1,094	(58)	1,036	306
Guarantee commitments given	1,432	(275)	1,157	342
TOTAL OFF-BALANCE SHEET IMPAIRED COMMITMENTS (STAGE 3)	**2,526**	**(333)**	**2,193**	**648**

In millions of euros	31 December 2018			
	Impaired financial assets (Stage 3)			Collateral received
	Gross value	Impairment	Net	
Loans and advances to credit institutions *(note 5.e)*	160	(98)	62	132
Loans and advances to customers *(note 5.e)*	33,957	(19,335)	14,622	9,663
Debt securities at amortised cost *(note 5.e)*	194	(78)	116	
TOTAL AMORTISED-COST IMPAIRED ASSETS (STAGE 3)	**34,311**	**(19,511)**	**14,800**	**9,795**
Financing commitments given	644	(37)	607	148
Guarantee commitments given	1,285	(281)	1,004	250
TOTAL OFF-BALANCE SHEET IMPAIRED COMMITMENTS (STAGE 3)	**1,929**	**(318)**	**1,611**	**398**

The following table present gross exposures of stage 3 assets change:

Gross value *In millions of euros*	**Impaired financial assets (Stage 3)**
AT 31 DECEMBER 2018	**34,311**
Transfer to stage 3	6,650
Transfer to stage 1 or stage 2	(2,412)
Amounts Written off	(6,423)
Others changes	(2,038)
AT 31 DECEMBER 2019	**30,088**

5.g FINANCIAL LIABILITIES AT AMORTISED COST DUE TO CREDIT INSTITUTIONS AND CUSTOMERS

In millions of euros	31 December 2019	31 December 2018
Deposits from credit institutions	**84,566**	**78,915**
On demand accounts	9,072	10,571
Interbank borrowings(1)(2)	68,847	61,859
Repurchase agreements	6,647	6,485
Deposits from customers	**834,667**	**796,548**
On demand deposits	516,862	473,968
Savings accounts	151,600	146,362
Term accounts and short-term notes	165,031	175,665
Repurchase agreements	1,174	553

(1) Changes over the period include the effect of IFRS 16 first time adoption (see note 2).
(2) Interbank borrowings from credit institutions include term borrowings from central banks.

5.h DEBT SECURITIES AND SUBORDINATED DEBT

This note covers all issued debt securities and subordinated debt measured at amortised cost and designated as at fair value through profit or loss.

➤ DEBT SECURITIES AT FAIR VALUE THROUGH PROFIT OR LOSS (NOTE 5.A)

Issuer/Issue date *In millions of euros*	Currency	Original amount in foreign currency *(millions)*	Date of call or interest step-up	Interest rate	Interest step-up	Conditions precedent for coupon payment(1)	31 December 2019	31 December 2018
Debt securities							**56,636**	**48,964**
Subordinated debt							**893**	**787**
Redeemable subordinated debt			(2)				**120**	**118**
Perpetual subordinated debt							**773**	**669**
BNP Paribas Fortis Dec. 2007(3)	EUR	3,000	Dec.-14	3-month Euribor +200 bp		A	773	669

(1) *Conditions precedent for coupon payment:*
A Coupon payments are halted should the issuer have insufficient capital or the underwriters become insolvent or when the dividend declared for Ageas shares falls below a certain threshold.

(2) *After agreement from the banking supervisory authority and at the issuer's initiative, redeemable subordinated debt issues may contain a call provision authorising the Group to redeem the securities prior to maturity by repurchasing them in the stock market, via public tender offers, or in the case of private placements over the counter. Debt issued by BNP Paribas SA or foreign subsidiaries of the Group via placements in the international markets may be subject to early redemption of the capital and early payment of interest due at maturity at the issuer's discretion on or after a date stipulated in the issue particulars (call option), or in the event that changes in the applicable tax rules oblige the BNP Paribas Group issuer to compensate debt-holders for the consequences of such changes. Redemption may be subject to a notice period of between 15 and 60 days, and is in all cases subject to approval by the banking supervisory authorities.*

(3) *Convertible And Subordinated Hybrid Equity-linked Securities (CASHES) issued by BNP Paribas Fortis (previously Fortis Banque) in December 2007. The CASHES are perpetual securities but may be exchanged for Ageas (previously Fortis SA/NV) shares at the holder's sole discretion at a price of EUR 239.40. However, as of 19 December 2014, the CASHES will be automatically exchanged into Ageas shares if their price is equal to or higher than EUR 359.10 for twenty consecutive trading days. The principal amount will never be redeemed in cash. The rights of the CASHES holders are limited to the Ageas shares held by BNP Paribas Fortis and pledged to them.*
Ageas and BNP Paribas Fortis have entered into a Relative Performance Note (RPN) contract, the value of which varies contractually so as to offset the impact on BNP Paribas Fortis of the relative difference between changes in the value of the CASHES and changes in the value of the Ageas shares.
As at 31 December 2019, the liability is eligible to prudential own funds for EUR 205 million.

DEBT SECURITIES MEASURED AT AMORTISED COST

Issuer/Issue date *In millions of euros*	Currency	Original amount in foreign currency *(millions)*	Date of call or interest step-up	Interest rate	Interest step-up	Conditions precedent for coupon payment(1)	31 December 2019	31 December 2018
Debt securities							**157,578**	**151,451**
Debt securities in issue with an initial maturity of less than one year							**60,905**	**70,077**
Negotiable debt securities							60,905	70,077
Debt securities in issue with an initial maturity of more than one year							**96,673**	**81,374**
Negotiable debt securities							45,924	50,809
Bonds							50,749	30,565
Subordinated debt							**20,003**	**17,627**
Redeemable subordinated debt			(2)				**18,242**	**15,876**
Undated subordinated notes							**1,526**	**1,515**
BNP Paribas SA Oct.-85	EUR	305	-	TMO -0.25%	-	B	254	254
BNP Paribas SA Sept.-86	USD	500	-	6 month-Libor +0.075%	-	C	244	239
BNP Paribas Cardif Nov.-14	EUR	1,000	Nov.-25	4.032%	3-month Euribor +393 bp	D	1,000	999
Others							28	23
Participating notes							**222**	**222**
BNP Paribas SA July-84(3)	EUR	337	-	(4)	-		215	215
Others							7	7
Expenses and commission, related debt							**13**	**14**

(1) Conditions precedent for coupon payment:

B Payment of the interest is mandatory, unless the Board of directors decides to postpone these payments after the Shareholders' General Meeting has officially noted that there is no income available for distribution, where this occurs within the 12-month period preceding the due date for payment of the interest. Interest payments are cumulative and are payable in full once dividend payments resume.

C Payment of the interest is mandatory, unless the Board of directors decides to postpone these payments after the Shareholders' General Meeting has validated the decision not to pay out a dividend, where this occurs within the 12-month period preceding the due date for payment of the interest. Interest payments are cumulative and are payable in full once dividend payments resume. The bank has the option of resuming payment of interest arrears, even where no dividend is paid out.

D Payment of the interest is mandatory, except for cases of regulatory deficiency, in agreement with the regulator, or of suspension of payments. Interest payments are cumulative and are payable in full, once coupon payments resume, or, if these events occur before, when the issuance is redeemed or when the issuer is liquidated.

(2) See reference relating to "Debt securities at fair value through profit or loss".

(3) The participating notes issued by BNP Paribas SA may be repurchased as provided for in the law of 3 January 1983. The number of notes in the market is 1,434,092.

(4) Depending on net income subject to a minimum of 85% of the TMO rate and a maximum of 130% of the TMO rate.

5.i FINANCIAL INVESTMENTS OF INSURANCE ACTIVITIES

In millions of euros	31 December 2019			31 December 2018		
	Assets not representative of unit-linked insurance contracts	Assets representative of unit-linked insurance contracts (financial risk supported by policyholders)	Total	Assets not representative of unit-linked insurance contracts	Assets representative of unit-linked insurance contracts (financial risk supported by policyholders)	Total
Financial instruments designated as at fair value through profit or loss	44,292	71,043	115,335	41,154	61,793	102,947
Derivative financial instruments	1,115		1,115	907		907
Available-for-sale financial assets	126,596		126,596	112,041		112,041
Held-to-maturity financial assets	1,914		1,914	3,720		3,720
Loans and receivables	3,089		3,089	3,605		3,605
Equity-method investments	359		359	363		363
Investment property	3,094	3,464	6,558	2,982	2,872	5,854
TOTAL	**180,459**	**74,507**	**254,966**	**164,772**	**64,665**	**229,437**
Reinsurers' share of technical reserves	2,852		2,852	2,871		2,871
FINANCIAL INVESTMENTS OF INSURANCE ACTIVITIES	**183,311**	**74,507**	**257,818**	**167,643**	**64,665**	**232,308**

Investments in financial instruments of insurance activities are accounted for according to IAS 39 principles.

The fair value of financial assets with contractual cash flows corresponding only to payments of principal and interest on principal amounts to EUR 116.9 billion as at 31 December 2019. It amounted to EUR 107.8 billion as at 31 December 2018, which represents a variation of EUR 9.1 billion over the period.

The fair value of other financial assets amounts to EUR 138.3 billion, and corresponds to all financial instruments that do not meet the previously mentioned criteria, derivatives and financial assets managed on a market value basis. It amounted to EUR 121.7 billion as at 31 December 2018, which represents a variation of EUR +16.6 billion over the period.

The fair value of investment properties which are not representative of unit-linked insurance contracts accounted for at amortised cost amounts to EUR 4.6 billion as at 31 December 2019, compared with EUR 4.0 billion as at 31 December 2018.

➤ MEASUREMENT OF THE FAIR VALUE OF FINANCIAL INSTRUMENTS

The criteria for allocating instruments to the levels of the fair value hierarchy, the corresponding valuation methodologies and the principles of transfer between the levels of the hierarchy for insurance investments are similar to those applied for the Group's other financial instruments (note 5.d).

In millions of euros	31 December 2019				31 December 2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Available-for-sale financial assets	**103,419**	**22,887**	**290**	**126,596**	**95,086**	**16,679**	**276**	**112,041**
Equity instruments	6,551	1,179	248	7,978	4,741	1,093	234	6,068
Debt securities	96,868	21,708	42	118,618	90,345	15,586	42	105,973
Financial instruments designated as at fair value through profit or loss	**88,724**	**19,296**	**7,315**	**115,335**	**80,097**	**16,315**	**6,535**	**102,947**
Equity instruments	87,084	12,774	6,549	106,407	77,989	11,131	6,458	95,578
Debt securities	1,640	6,522	766	8,928	2,108	5,184	77	7,369
Derivative financial instruments	**-**	**859**	**256**	**1,115**	**-**	**622**	**285**	**907**
FINANCIAL ASSETS MEASURED AT FAIR VALUE	**192,143**	**43,042**	**7,861**	**243,046**	**175,183**	**33,616**	**7,096**	**215,895**

Level 1: this level comprises equities and liquid bonds, derivative instruments traded on organised markets (futures, options, etc.), units of funds and UCITS for which the net asset value is calculated on a daily basis.

Level 2: this level comprises equities, certain government or corporate bonds, other fund units and UCITS and over-the-counter derivatives.

Level 3: this level consists mainly of fund units and shares which are not quoted on active markets, consisting mainly of units in venture capital companies and funds.

TABLE OF MOVEMENTS IN LEVEL 3 FINANCIAL INSTRUMENTS

For Level 3 financial instruments, the following movements occurred during the period:

	Financial assets		
In millions of euros	Available-for-sale financial instruments	Financial instruments as at fair value through profit or loss	Total
AT 31 DECEMBER 2018	**276**	**6,820**	**7,096**
Purchases	54	2,941	2,995
Sales	(53)	(2,253)	(2,306)
Settlements	(75)	(208)	(283)
Transfers to Level 3	84	236	320
Transfers from Level 3	(19)	(582)	(601)
Gains recognised in profit or loss	5	618	623
Items related to exchange rate movements	1	(2)	(1)
Changes in fair value of assets and liabilities recognised in equity	17		17
AT 31 DECEMBER 2019	**290**	**7,571**	**7,861**

During the year ended 31 December 2019, transfers between Level 1 and Level 2 were not significant.

DETAILS OF AVAILABLE-FOR-SALE FINANCIAL ASSETS

	31 December 2019			31 December 2018		
In millions of euros	Balance sheet value	of which depreciation	of which changes in value recognised directly in equity	Balance sheet value	of which depreciation	of which changes in value recognised directly in equity
Debt securities	118,618		12,729	105,973		8,461
Equity instruments	7,978	(417)	2,009	6,068	(312)	668
TOTAL AVAILABLE-FOR-SALE FINANCIAL ASSETS	**126,596**	**(417)**	**14,738**	**112,041**	**(312)**	**9,129**

FAIR VALUE OF FINANCIAL INSTRUMENTS CARRIED AT AMORTISED COST

	31 December 2019					31 December 2018				
In millions of euros	Level 1	Level 2	Level 3	Total	Carrying value	Level 1	Level 2	Level 3	Total	Carrying value
Held-to-maturity financial assets	2,224			2,224	1,914	4,116			4,116	3,720
Loans and receivables	121	2,985	18	3,124	3,089	125	3,487	21	3,633	3,605

5.j TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES

In millions of euros	31 December 2019	31 December 2018
Technical reserves – Non-Life insurance contracts	4,768	4,590
Technical reserves – Life insurance contracts	154,382	143,671
Insurance contracts	87,352	84,392
Unit-linked contracts	67,030	59,279
Technical liabilities – investment contracts	48,179	44,110
Investments contracts with discretionary participation feature	40,723	38,604
Investment contracts without discretionary participation feature	7,456	5,506
Policyholders' surplus reserve – liability	24,980	17,379
Total technical reserves and liabilities related to insurance and investment contracts	**232,309**	**209,750**
Debts arising out of insurance and reinsurance operations	3,464	3,056
Derivative financial instruments	1,164	885
TOTAL TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES	**236,937**	**213,691**

The policyholders' surplus reserve arises from the application of shadow accounting. It represents the interest of policyholders within French and Italian life insurance subsidiaries in unrealised gains and losses and impairment losses on assets where the benefit paid under the policy is linked to the return on those assets. It is obtained from stochastic calculations modelling the unrealised gains and losses attributable to policyholders based on economic scenarios and assumptions as regards rates paid to customers and new business inflows. For France, this resulted in an interest of 90% in 2019, unchanged from 2018.

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Liabilities related to insurance contracts at start of period	209,750	206,970
Additions to insurance contract technical reserves and deposits taken on financial contracts related to life insurance	30,807	20,371
Claims and benefits paid	(17,010)	(15,493)
Effect of changes in value of admissible investments related to unit-linked contracts	8,381	(5,135)
Effect of movements in exchange rates	311	34
Effect of changes in the scope of consolidation	70	3,003
Liabilities related to insurance contracts at end of period	232,309	209,750

See note 5.i for details of reinsurers' share of technical reserves.

5.k CURRENT AND DEFERRED TAXES

In millions of euros	31 December 2019	31 December 2018
Current taxes	1,857	1,958
Deferred taxes(1)	4,956	5,262
Current and deferred tax assets	6,813	7,220
Current taxes(2)	2,103	1,023
Deferred taxes(1)	1,463	1,232
Current and deferred tax liabilities	3,566	2,255

(1) Changes over the period include the effect of IFRS 16 first time adoption (see note 2).
(2) Changes over the period include the effect of IFRIC 23 first time adoption (see note 5.p).

Change in deferred tax by nature over the period:

In millions of euros	31 December 2018	Changes recognised in profit or loss	Changes recognised in equity that may be reclassified to profit or loss	Changes recognised in equity that will not be reclassified to profit or loss	Effects of exchange rates, consolidation scope and other movements	31 December 2019
Financial instruments	(518)	(106)	(391)	(1)	(25)	(1,041)
Provisions for employee benefit obligations	826	80	-	(14)	(21)	871
Unrealised finance lease reserve	(381)	(82)	-	-	(42)	(505)
Credit risk impairment	3,111	172	-	-	(12)	3,271
Tax loss carryforwards	1,330	(39)	-	-	(172)	1,119
Other items	(338)	(221)	-	-	337	(222)
NET DEFERRED TAXES	**4,030**	**(196)**	**(391)**	**(15)**	**65**	**3,493**
Deferred tax assets	5,262	-	-	-	-	4,956
Deferred tax liabilities	(1,232)	-	-	-	-	(1,463)

In order to determine the amount of the tax loss carryforwards recognised as assets, the Group conducts every year a specific review for each relevant entity based on the applicable tax regime, notably incorporating any time limit rules, and a realistic projection of their future revenue and charges in line with their business plan.

Deferred tax assets recognised on tax loss carryforwards are mainly related to BNP Paribas Fortis for EUR 824 million, with a 6-year expected recovery period (unlimited carryforward period).

Unrecognised deferred tax assets totalled EUR 1,291 million at 31 December 2019 compared with EUR 1,324 million at 31 December 2018.

5.l ACCRUED INCOME/EXPENSE AND OTHER ASSETS/LIABILITIES

In millions of euros	31 December 2019	31 December 2018
Guarantee deposits and bank guarantees paid	75,478	64,988
Collection accounts	288	369
Accrued income and prepaid expenses(1)	6,162	7,355
Other debtors and miscellaneous assets(1)	31,607	30,634
TOTAL ACCRUED INCOME AND OTHER ASSETS	**113,535**	**103,346**
Guarantee deposits received	58,751	48,308
Collection accounts	3,026	2,820
Accrued expense and deferred income(1)	8,027	10,122
Lease liabilities(1)	3,295	
Other creditors and miscellaneous liabilities(1)	29,650	28,312
TOTAL ACCRUED EXPENSE AND OTHER LIABILITIES	**102,749**	**89,562**

(1) Changes over the period include the effect of IFRS 16 first time adoption (see note 2).

5.m EQUITY-METHOD INVESTMENTS

Cumulated financial information of associates and joint ventures is presented in the following table:

In millions of euros	Year to 31 Dec. 2019			31 December 2019	Year to 31 Dec. 2018			31 December 2018
	Share of net income	Share of changes in assets and liabilities recognised directly in equity	Share of net income and changes in assets and liabilities recognised directly in equity	*Equity-method investments*	*Share of net income*	Share of changes in assets and liabilities recognised directly in equity	Share of net income and changes in assets and liabilities recognised directly in equity	Equity-method investments
Joint ventures	*64*	*(17)*	47	965	*63*	*(74)*	(11)	804
Associates(1)	*522*	*160*	682	4,987	*565*	*(62)*	503	4,968
TOTAL EQUITY-METHOD ENTITIES	***586***	***143***	**729**	**5,952**	***628***	***(136)***	**492**	**5,772**

(1) Including controlled but non material entities consolidated under the equity method.

Financing and guarantee commitments given by the Group to joint ventures are listed in the note 8.h Other related parties.

The carrying amount of the Group's investment in the main joint ventures and associates is presented in the following table:

In millions of euros	Country of registration	Activity	Interest (%)	31 December 2019	31 December 2018
Joint ventures					
Bpost banque	Belgium	Retail Banking	50%	242	249
Union de Creditos Inmobiliarios	Spain	Retail mortgage	50%	220	239
Associates					
AG Insurance	Belgium	Insurance	25%	1,747	1,647
Bank of Nanjing	China	Retail Banking	15%	1,569	1,372

5.n PROPERTY, PLANT, EQUIPMENT AND INTANGIBLE ASSETS USED IN OPERATIONS, INVESTMENT PROPERTY

In millions of euros	31 December 2019			31 December 2018		
	Gross value	Accumulated depreciation, amortisation and impairment	Carrying amount	Gross value	Accumulated depreciation, amortisation and impairment	Carrying amount
INVESTMENT PROPERTY	**894**	**(283)**	**611**	**1,031**	**(316)**	**715**
Land and buildings(1)	13,565	(5,703)	7,862	7,084	(2,061)	5,023
Equipment, furniture and fixtures(1)	7,494	(5,410)	2,084	7,130	(5,083)	2,047
Plant and equipment leased as lessor under operating leases	28,126	(7,546)	20,580	24,675	(6,805)	17,870
Other property, plant and equipment(1)	2,371	(1,212)	1,159	2,086	(1,089)	997
PROPERTY, PLANT AND EQUIPMENT	**51,556**	**(19,871)**	**31,685**	**40,975**	**(15,038)**	**25,937**
Of which right-of-use	6,660	(3,647)	3,013			
PROPERTY, PLANT AND EQUIPMENT AND INVESTMENT PROPERTY	**52,450**	**(20,154)**	**32,296**	**42,006**	**(15,354)**	**26,652**
Purchased software	4,093	(3,072)	1,021	3,703	(2,724)	979
Internally-developed software	4,664	(3,581)	1,083	4,250	(3,236)	1,014
Other intangible assets	2,245	(497)	1,748	2,334	(544)	1,790
INTANGIBLE ASSETS	**11,002**	**(7,150)**	**3,852**	**10,287**	**(6,504)**	**3,783**

(1) Changes over the period include the effect of IFRS 16 first time adoption (see note 2).

Investment property

Land and buildings leased by the Group as lessor under operating leases are recorded in "Investment property".

The estimated fair value of investment property accounted for at amortised cost at 31 December 2019 is EUR 719 million, compared with EUR 800 million at 31 December 2018.

Operating leases

Operating leases and investment property transactions are in certain cases subject to agreements providing for the following minimum future payments:

In millions of euros	31 December 2019	31 December 2018
Future minimum lease payments receivable under non-cancellable leases	**7,182**	**6,483**
Payments receivable within 1 year	*3,064*	*2,603*
Payments receivable after 1 year but within 5 years	*4,076*	*3,852*
Payments receivable beyond 5 years	*42*	*28*

Future minimum lease payments receivable under non-cancellable leases are payments that the lessee is required to make during the lease term.

Intangible assets

Other intangible assets include leasehold rights, goodwill and trademarks acquired by the Group.

Amortisation and provision

Net depreciation and amortisation expense for the year ended 31 December 2019 was EUR 2.415 million, compared with EUR 1.674 million for the year ended 31 December 2018.

The net increase in impairment on property, plant, equipment and intangible assets taken to the profit and loss account for the year ended 31 December 2019 amounted to EUR 30 million, compared with EUR 2 million for the year ended 31 December of 2018.

5.o GOODWILL

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
CARRYING AMOUNT AT START OF PERIOD	**8,487**	**9,571**
Acquisitions	55	99
Divestments	-	-
Impairment recognised during the period	(820)	(30)
Loss of control of First Hawaiian Inc (note 8.c)	-	(1,315)
Exchange rate adjustments	97	159
Other movements	(2)	3
CARRYING AMOUNT AT END OF PERIOD	**7,817**	**8,487**
Gross value	11,608	11,462
Accumulated impairment recognised at the end of period	(3,791)	(2,975)

Goodwill by cash-generating unit is as follows:

In millions of euros	Carrying amount		Impairment recognised during the year ended 2019		Acquisitions during the year ended 2019	
	31 December 2019	31 December 2018	Year to 31 Dec. 2019	Year to 31 Dec. 2018	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Retail Banking & Services	**6,602**	**7,348**	**(820)**	**(30)**	**(2)**	**69**
Domestic Markets	**1,440**	**1,428**				**17**
Arval	515	503				
Leasing Solutions	151	151				17
New Digital Businesses	159	159				
Personal Investors	609	609				
Others	6	6				
International Financial Services	**5,162**	**5,920**	**(820)**	**(30)**	**(2)**	**52**
Asset Management	187	185				15
Insurance	353	352				
BancWest	2,571	3,008	(500)			
Personal Finance	1,293	1,303				
Personal Finance – partnership tested individually		318	(318)	(30)		
Real Estate	407	404	(2)			(2)
Wealth Management	314	313			(2)	39
Others	37	37				
Corporate & Institutional Banking	**1,212**	**1,136**			**57**	**30**
Corporate Banking	277	276				
Global Markets	481	418			57	
Securities Services	454	442				30
Other Activities	**3**	**3**				
TOTAL GOODWILL	**7,817**	**8,487**	**(820)**	**(30)**	**55**	**99**
Negative goodwill			2	83		
CHANGE IN VALUE OF GOODWILL RECOGNISED IN THE PROFIT AND LOSS ACCOUNT			**(818)**	**53**		

The cash-generating units to which goodwill is allocated are:

Arval: Specialist in vehicle long-term leasing and mobility, Arval offers corporates (from multinational companies to small and medium companies), employees and individuals tailored solutions that optimise their mobility.

Leasing Solutions: BNP Paribas Leasing Solutions uses a multi-channel partnership approach (sales via referrals, partnerships, direct sales and banking networks) to offer corporate and small business clients an array of leasing and rental solutions, ranging from equipment financing to fleet outsourcing.

New digital businesses: they include in particular the account management service "Nickel", open to all, without any conditions regarding income, deposits or personal wealth, and without any overdraft or credit facility. This service, which operates in real time using the latest technology, is available through over 5,500 points of sale.

Personal Investors: BNP Paribas Personal Investors is a digital specialist of banking and investment services. Mainly based in Germany, India, Austria and Spain, it provides a wide range of banking, savings and long and short term investment services to individual clients via the internet, and also on the phone and face-to-face. In addition to its activities destined to private clients, Personal Investors offers its services and IT platform to independent financial consultants, asset managers and FinTechs.

Asset Management: BNP Paribas Asset Management is the dedicated asset management business line of the BNP Paribas Group and offers services to individual investors (through internal distributors – BNP Paribas Private and Retail Banking – and external distributors), to corporates and to institutional investors (insurance companies, retirement funds, official institutions, consultants). Its aim is to offer an added value based on a broad range of expertise throughout its active management of equities and bonds, its activity of private debt and real assets management and its multi-asset, quantitative and solutions division.

Insurance: BNP Paribas Cardif, a world leader in personal insurance, has designed, developed and marketed savings and protection products and services to protect individuals, their projects and their assets.

BNP Paribas Cardif also offer products in damage insurance, health insurance, budget insurance, revenue and means of payment insurance, unexpected event protection (unemployment, accident, death, theft or breakage) or the protection of private digital data to meet the evolution of customers' needs.

In 2019, BNP Paribas Cardif sold part of its interest in the Indian life insurer SBI Life. After this partial sale, the Group retains a 5.2% stake.

BancWest: In the United States, the Retail Banking business is henceforth conducted through Bank of the West, which markets a very broad range of Retail Banking products and services to individuals, small businesses and corporate clients, through branches and offices in 24 States, mainly in western and mid-western America. It also has strong positions across the USA in several specialized lending activities, such as marine, recreational vehicles and agribusiness, and develops its commercial set up particularly in Corporate Banking, Wealth Management and Small and Medium Enterprise businesses.

Personal Finance: BNP Paribas Personal Finance is the Group's consumer credit specialist. Through its brands and partnerships such as Cetelem, Cofinoga, Findomestic, AlphaCredit, Opel Vauxhall or SevenDay Finans AB, Personal Finance provides a full range of consumer loans at point of sale (retail stores and car dealerships) or through its customer relation centres and websites and mobile applications. The business line, in some countries outside the Domestic Markets, is integrated into the BNP Paribas Group's Retail Banking.

Real Estate: BNP Paribas Real Estate serves the needs of its clients, whether institutional investors, corporates, public entities or individuals, at all stages of the life cycle of their property (from the conception of a construction project to its daily management).

Wealth Management: Wealth Management encompasses the Private Banking activities of BNP Paribas and serves a clientele of wealthy individuals, shareholder families and entrepreneurs seeking a one-stop shop for all their wealth management and financial needs.

In 2018, BNP Paribas Wealth Management purchased the Private Banking activities of ABN Amro in Luxembourg.

Corporate Banking: Corporate Banking combines financing solutions to corporates, all transaction banking products, corporate finance advisory services in mergers and acquisitions and primary equity activities.

Global Markets: Global Markets provides investment, hedging, financing and research services across asset classes, to corporate and institutional clients – as well as private and Retail Banking networks. The sustainable, long-term business model of Global Markets connects clients to capital markets throughout EMEA (Europe, Middle East & Africa), Asia Pacific and the Americas, with innovative solutions and digital platforms. Global Markets includes activities of Fixed Income, Currencies & Commodities and Equity & Prime Services.

Securities Services: BNP Paribas Securities Services is one of the major global players in Securities Services and provides integrated solutions for all actors involved in the investment cycle, sell side, buy side and issuers.

Goodwill impairment tests are based on three different methods: observation of transactions related to comparable businesses, share price data for listed companies with comparable businesses, and discounted future cash flows (DCF).

If one of the two comparables-based methods indicates the need for impairment, the DCF method is used to validate the results and determine the amount of impairment required.

The DCF method is based on a number of assumptions in terms of future revenues, expenses and cost of risk (cash flows) based on medium-term business plans over a period of five years. Cash flow projections beyond the 5-year forecast period are based on a growth rate to perpetuity and are normalised when the short-term environment does not reflect the normal conditions of the economic cycle.

The key parameters which are sensitive to the assumptions made are the cost of capital, the cost/income ratio, the cost of risk and the growth rate to perpetuity.

Cost of capital is determined on the basis of a risk-free rate, an observed market risk premium weighted by a risk factor based on comparables specific to each cash-generating units. The values of these parameters are obtained from external information sources.

Allocated capital is determined for each cash-generating units based on the "Common Equity Tier One" regulatory requirements for the legal entity to which the cash-generating units belongs, with a minimum of 7%.

The growth rate to perpetuity used is 2% for mature economies in Europe and 3% for BancWest more specific to California. For CGUs implemented in countries with high levels of inflation, a specific add-on is taken into account (calculated according to inflation rates disclosed by external sources).

The following table shows the sensitivity of cash generating unit valuations to changes in the value of parameters used in the DCF calculation: the cost of capital, the cost/income ratio in terminal value, the cost of risk in terminal value and the growth rate to perpetuity.

In 2019, the downward revision of the financial perspectives for the Personal Finance partnership specifically tested led to depreciate the total goodwill (318 million euros).

The economic environment evolution, particularly in interest rates in the United States, have led to partially depreciate BancWest's goodwill by 500 million euros.

SENSITIVITY OF THE MAIN GOODWILL VALUATIONS TO A 10-BASIS POINT CHANGE IN THE COST OF CAPITAL, A 1% CHANGE IN THE COST/INCOME RATIO IN TERMINAL VALUE, A 5% CHANGE OF THE COST OF RISK IN TERMINAL VALUE AND A 50-BASIS POINT CHANGE IN THE GROWTH RATE TO PERPETUITY

In millions of euros	BancWest	Personal Finance
Cost of capital	**9.3%**	**10.0%**
Adverse change (+10 basis points)	(108)	(207)
Positive change (-10 basis points)	112	212
Cost/income ratio	**62.3%**	**45.3%**
Adverse change (+1%)	(199)	(431)
Positive change (-1%)	199	431
Cost of risk	**(127)**	**(1,999)**
Adverse change (+5%)	(48)	(251)
Positive change (-5%)	48	251
Growth rate to perpetuity	**3.0%**	**2.1%**
Adverse change (-50 basis points)	(200)	(446)
Positive change (+50 basis points)	234	507

Concerning the homogeneous Personal Finance set mentioned above, there would be no need to depreciate even by using, for the impairment tests, the four most unfavorable variations in the table.

5.p PROVISIONS FOR CONTINGENCIES AND CHARGES

PROVISIONS FOR CONTINGENCIES AND CHARGES BY TYPE

In millions of euros	31 December 2018	Net additions to provisions	Provisions used	Changes in value recognised directly in equity	Effect of movements in exchange rates and other movements[1]	31 December 2019
Provisions for employee benefits	**6,039**	**1,350**	**(992)**	**199**	**40**	**6,636**
of which post-employment benefits *(note 7.b)*	3,998	250	(331)	189	35	4,141
of which post-employment healthcare benefits *(note 7.b)*	131	6	(4)	10	3	146
of which provision for other long-term benefits *(note 7.c)*	1,120	344	(277)		1	1,188
of which provision for voluntary departure, early retirement plans, and headcount adaptation plan *(note 7.d)*	380	294	(155)		(6)	513
of which provision for share-based payments *(note 7.e)*	410	456	(225)		7	648
Provisions for home savings accounts and plans	**136**	**(12)**				**124**
Provisions for credit commitments *(note 3.h)*	**1,192**	**95**	**(32)**		**(21)**	**1,234**
Provisions for litigations	**1,348**	**173**	**(75)**		**(848)**	**598**
Other provisions for contingencies and charges	**905**	**187**	**(201)**		**3**	**894**
TOTAL PROVISIONS FOR CONTINGENCIES AND CHARGES	**9,620**	**1,793**	**(1,300)**	**199**	**(826)**	**9,486**

(1) *Changes over the period include the effect of IFRIC 23 first time adoption (see note 5.k)*

➤ PROVISIONS AND DISCOUNT FOR HOME SAVINGS ACCOUNTS AND PLANS

In millions of euros	31 December 2019	31 December 2018
Deposits collected under home savings accounts and plans	**18,149**	**18,102**
of which deposits collected under home savings plans	16,026	15,956
Aged more than 10 years	*5,231*	*3,824*
Aged between 4 and 10 years	*8,777*	*8,471*
Aged less than 4 years	*2,018*	*3,661*
Outstanding loans granted under home savings accounts and plans	**35**	**52**
of which loans granted under home savings plans	6	9
Provisions and discount recognised for home savings accounts and plans	**125**	**137**
provisions recognised for home savings plans	123	133
provisions recognised for home savings accounts	1	3
discount recognised for home savings accounts and plans	1	1

5.q OFFSETTING OF FINANCIAL ASSETS AND LIABILITIES

The following tables present the amounts of financial assets and liabilities before and after offsetting. This information, required by IFRS 7, aims to enable the comparability with the accounting treatment applicable in accordance with generally accepted accounting principles in the United States (US GAAP), which are less restrictive than IAS 32 as regards offsetting.

"Amounts set off on the balance sheet" have been determined according to IAS 32. Thus, a financial asset and a financial liability are offset and the net amount presented on the balance sheet when, and only when, the Group has a legally enforceable right to set off the recognised amounts and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously. Amounts set off derive mainly from repurchase agreements and derivative instruments traded with clearing houses.

The "impacts of master netting agreements and similar agreements" are relative to outstanding amounts of transactions within an enforceable agreement, which do not meet the offsetting criteria defined by IAS 32. This is the case of transactions for which offsetting can only be performed in case of default, insolvency or bankruptcy of one of the contracting parties.

"Financial instruments given or received as collateral" include guarantee deposits and securities collateral recognised at fair value. These guarantees can only be exercised in case of default, insolvency or bankruptcy of one of the contracting parties.

Regarding master netting agreements, the guarantee deposits received or given in compensation for the positive or negative fair values of financial instruments are recognised in the balance sheet in accrued income or expenses and other assets or liabilities.

In millions of euros, at 31 December 2019	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments received as collateral	Net amounts
Assets						
Financial instruments at fair value through profit or loss						
Securities	131,935		131,935			131,935
Loans and repurchase agreements	352,599	(155,672)	196,927	(45,772)	(143,292)	7,863
Derivative financial instruments (including derivatives used for hedging purposes)	543,166	(283,427)	259,739	(179,483)	(34,902)	45,354
Financial assets at amortised cost	935,923		935,923	(536)	(1,679)	933,708
of which repurchase agreements	*2,307*		*2,307*	*(536)*	*(1,679)*	*92*
Accrued income and other assets	113,535		113,535		(38,342)	75,193
of which guarantee deposits paid	*75,478*		*75,478*		*(38,342)*	*37,136*
Other assets not subject to offsetting	526,654		526,654			526,654
TOTAL ASSETS	**2,603,812**	**(439,099)**	**2,164,713**	**(225,791)**	**(218,215)**	**1,720,707**

In millions of euros, at 31 December 2019	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments given as collateral	Net amounts
Liabilities						
Financial instruments at fair value through profit or loss						
Securities	65,490		65,490			65,490
Deposits and repurchase agreements	370,765	(155,672)	215,093	(44,684)	(163,430)	6,979
Issued debt securities	63,758		63,758			63,758
Derivative financial instruments (including derivatives used for hedging purposes)	535,428	(283,427)	252,001	(179,483)	(39,920)	32,598
Financial liabilities at amortised cost	919,234		919,234	(1,624)	(5,942)	911,668
of which repurchase agreements	*7,821*		*7,821*	*(1,624)*	*(5,942)*	*255*
Accrued expense and other liabilities	102,749		102,749		(30,939)	71,810
of which guarantee deposits received	*58,751*		*58,751*		*(30,939)*	*27,812*
Other liabilities not subject to offsetting	434,543		434,543			434,543
TOTAL LIABILITIES	**2,491,967**	**(439,099)**	**2,052,868**	**(225,791)**	**(240,231)**	**1,586,846**

In millions of euros, at 31 December 2018	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments received as collateral	Net amounts
Assets						
Financial instruments at fair value through profit or loss						
Securities	121,954		121,954			121,954
Loans and repurchase agreements	283,879	(100,163)	183,716	(37,657)	(135,421)	10,638
Derivative financial instruments (including derivatives used for hedging purposes)	480,745	(238,040)	242,705	(177,352)	(28,676)	36,677
Financial assets at amortised cost	860,567	(67)	860,500	(365)	(1,312)	858,823
of which repurchase agreements	*1,781*		*1,781*	*(365)*	*(1,312)*	*104*
Accrued income and other assets	103,346		103,346		(30,813)	72,533
of which guarantee deposits paid	*64,988*		*64,988*		*(30,813)*	*34,175*
Other assets not subject to offsetting	528,615		528,615			528,615
TOTAL ASSETS	**2,379,106**	**(338,270)**	**2,040,836**	**(215,374)**	**(196,222)**	**1,629,240**

In millions of euros, at 31 December 2018	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments given as collateral	Net amounts
Liabilities						
Financial instruments at fair value through profit or loss						
Securities	75,189		75,189			75,189
Deposits and repurchase agreements	304,202	(100,163)	204,039	(36,754)	(153,961)	13,324
Issued debt securities	54,908		54,908			54,908
Derivative financial instruments (including derivatives used for hedging purposes)	475,521	(238,040)	237,481	(177,352)	(31,226)	28,903
Financial liabilities at amortised cost	875,530	(67)	875,463	(1,268)	(5,311)	868,884
of which repurchase agreements	*7,038*		*7,038*	*(1,268)*	*(5,311)*	*459*
Accrued expense and other liabilities	89,562		89,562		(24,764)	64,798
of which guarantee deposits received	*48,308*		*48,308*		*(24,764)*	*23,544*
Other liabilities not subject to offsetting	398,468		398,468			398,468
TOTAL LIABILITIES	**2,273,380**	**(338,270)**	**1,935,110**	**(215,374)**	**(215,262)**	**1,504,474**

5.r TRANSFERS OF FINANCIAL ASSETS

Financial assets that have been transferred but not derecognised by the Group are mainly composed of securities sold temporarily under repurchase agreements or securities lending transactions, as well as securitised assets. The liabilities associated to securities temporarily sold under repurchase agreements consist of debts recognised under the "repurchase agreements" heading. The liabilities associated to securitised assets consist of the securitisation notes purchased by third parties.

➤ SECURITIES LENDING, REPURCHASE AGREEMENTS AND OTHER TRANSACTIONS:

In millions of euros, at	31 December 2019		31 December 2018	
	Carrying amount of transferred assets	Carrying amount of associated liabilities	Carrying amount of transferred assets	Carrying amount of associated liabilities
Securities lending operations				
Financial instruments at fair value through profit or loss	13,358	-	6,838	-
Financial assets at amortised cost	1,408	-	801	-
Financial assets at fair value through equity	320	-	25	-
Repurchase agreements				
Financial instruments at fair value through profit or loss	33,203	33,148	34,871	34,699
Financial assets at amortised cost	3,664	3,621	627	624
Financial assets at fair value through equity	988	984	1,766	1,766
Financial investments of insurance activities	5,844	5,921	5,979	5,855
TOTAL	**58,785**	**43,674**	**50,907**	**42,944**

➤ SECURITISATION TRANSACTIONS PARTIALLY REFINANCED BY EXTERNAL INVESTORS, WHOSE RECOURSE IS LIMITED TO THE TRANSFERRED ASSETS:

In millions of euros, at 31 December 2019	Carrying amount of transferred assets	Carrying amount of associated liabilities	Fair value of transferred assets	Fair value of associated liabilities	Net position
Securitisation					
Financial instruments at fair value through profit or loss	28	28	28	28	-
Financial assets at amortised cost	19,674	17,431	19,035	17,471	1,564
Financial assets at fair value through equity	18	18	17	17	-
TOTAL	**19,720**	**17,477**	**19,080**	**17,516**	**1,564**

In millions of euros, at 31 December 2018	Carrying amount of transferred assets	Carrying amount of associated liabilities	Fair value of transferred assets	Fair value of associated liabilities	Net position
Securitisation					
Financial instruments at fair value through profit or loss	163	163	163	163	-
Financial assets at amortised cost	14,050	12,913	14,227	12,916	1,311
Financial assets at fair value through equity	21	21	21	21	-
TOTAL	**14,234**	**13,097**	**14,411**	**13,100**	**1,311**

There have been no significant transfers leading to partial or full derecognition of the financial assets in which the Bank has a continuing involvement.

Note 6 FINANCING AND GUARANTEE COMMITMENTS

6.a FINANCING COMMITMENTS GIVEN OR RECEIVED

Contractual value of financing commitments given and received by the Group:

In millions of euros	31 December 2019	31 December 2018
Financing commitments given		
to credit institutions	4,999	3,201
to customers	324,077	301,447
Confirmed financing commitments	*255,975*	*231,109*
Other commitments given to customers	*68,102*	*70,338*
TOTAL FINANCING COMMITMENTS GIVEN	**329,076**	**304,648**
of which stage 1	*317,180*	*292,425*
of which stage 2	*9,862*	*10,511*
of which stage 3	*1,094*	*644*
of which insurance activities	*940*	*1,068*
Financing commitments received		
from credit institutions	70,725	72,484
from customers	2,633	11,244
TOTAL FINANCING COMMITMENTS RECEIVED	**73,358**	**83,728**

6.b GUARANTEE COMMITMENTS GIVEN BY SIGNATURE

In millions of euros	31 December 2019	31 December 2018
Guarantee commitments given		
to credit institutions	32,325	33,487
to customers	118,408	113,129
Property guarantees	2,767	1,968
Sureties provided to tax and other authorities, other sureties	61,003	54,019
Other guarantees	54,638	57,142
TOTAL GUARANTEE COMMITMENTS GIVEN	**150,733**	**146,616**
of which stage 1	*142,780*	*138,615*
of which stage 2	*6,518*	*6,713*
of which stage 3	*1,432*	*1,285*
of which insurance activities	*3*	*3*

6.c SECURITIES COMMITMENTS

In connection with the settlement date accounting for securities, commitments representing securities to be delivered or securities to be received are the following:

In millions of euros	31 December 2019	31 December 2018
Securities to be delivered	8,511	14,134
Securities to be received	10,792	12,869

6.d OTHER GUARANTEE COMMITMENTS

➤ FINANCIAL INSTRUMENTS GIVEN AS COLLATERAL

In millions of euros	31 December 2019	31 December 2018
Financial instruments (negotiable securities and private receivables) lodged with central banks and eligible for use at any time as collateral for refinancing transactions after haircut	**102,466**	**104,804**
Used as collateral with central banks	32,659	35,216
Available for refinancing transactions	*69,807*	*69,588*
Securities sold under repurchase agreements	**388,683**	**314,705**
Other financial assets pledged as collateral for transactions with credit institutions, financial customers or subscribers of covered bonds issued by the Group(1)	**152,489**	**124,148**

(1) Notably including "Société de Financement de l'Économie Française" and "Caisse de Refinancement de l'Habitat" financing.

The fair value of financial instruments given as collateral or transferred under repurchase agreements by the Group that the beneficiary is authorised to sell or reuse as collateral amounted to EUR 486,464 million at 31 December 2019 (EUR 396,876 million at 31 December 2018).

➤ FINANCIAL INSTRUMENTS RECEIVED AS COLLATERAL

In millions of euros	31 December 2019	31 December 2018
Financial instruments received as collateral (excluding repurchase agreements)	**181,696**	**162,184**
of which instruments that the Group is authorised to sell and reuse as collateral	*99,061*	*82,543*
Securities received under repurchase agreements	**376,752**	**287,047**

The fair value of financial instruments received as collateral or under repurchase agreements that the Group effectively sold or reused as collateral amounted to EUR 307,285 million at 31 December 2019 (compared with EUR 268,973 million at 31 December 2018).

Note 7 SALARIES AND EMPLOYEE BENEFITS

7.a SALARY AND EMPLOYEE BENEFIT EXPENSE

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Fixed and variable remuneration, incentive bonuses and profit-sharing	12,992	12,403
Employee benefit expense	4,021	3,665
Payroll taxes	540	549
TOTAL SALARY AND EMPLOYEE BENEFIT EXPENSE	**17,553**	**16,617**

7.b POST-EMPLOYMENT BENEFITS

IAS 19 distinguishes between two categories of plans, each handled differently depending on the risk incurred by the entity. When the entity is committed to paying a fixed amount, stated as a percentage of the beneficiary's annual salary, for example, to an external entity handling payment of the benefits based on the assets available for each plan member, it is described as a defined-contribution plan. Conversely, when the entity's obligation is to manage the financial assets funded through the collection of contributions from employees and to bear the cost of benefits itself or to guarantee the final amount subject to future events, it is described as a defined-benefit plan. The same applies, if the entity entrusts management of the collection of premiums and payment of benefits to a separate entity, but retains the risk arising from management of the assets and/or from future changes in the benefits.

Main Defined-contribution pension plans for Group entities

The BNP Paribas Group has implemented over the past few years a wide campaign of converting defined-benefit plans into defined-contribution plans.

Thus, in France, the BNP Paribas Group pays contributions to various nationwide basic and top-up pension schemes. BNP Paribas SA and certain subsidiaries have set up a funded pension plan under a company-wide agreement. Under this plan, employees will receive an annuity on retirement in addition to the pension paid by nationwide schemes.

Since defined-benefit plans have been closed to new employees in most countries outside France, they are offered the benefit of joining defined-contribution pension plans.

The amount paid into defined-contribution post-employment plans in the year ended 31 December 2019 was EUR 676 million, compared with EUR 612 million in the year ended 31 December 2018.

The breakdown by major contributors is determined as follows:

Contribution amount *In millions of euros*	Year to 31 Dec. 2019	Year to 31 Dec. 2018
France	343	334
Italy	67	63
UK	54	50
USA	50	40
Germany	5	4
Turkey	32	30
Others	125	91
TOTAL	**676**	**612**

In Italy, the plan introduced by BNL is funded by employer contributions (4.2% of salaries) and employee contributions (2% of salaries). Employees can also make additional voluntary contributions.

In the United Kingdom, the employer contributes 12% of salaries for the majority of employees; employees can make additional voluntary contributions.

In the US, the bank matches the voluntary contributions made by employees, within certain limits.

Main defined-benefit pension plans for Group entities, of which indemnities payable on retirement

Defined-benefit plans

In Belgium, BNP Paribas Fortis funds a defined-benefit plan, based on final salary and number of years of service, for its management and employees who joined the bank before its pension plans were harmonised on 1 January 2002. Actuarial liabilities under this scheme are pre-funded at 93% at 31 December 2019 (compared with 92% at 31 December 2018) through AG Insurance, in which the BNP Paribas Group owns a 25% equity interest.

BNP Paribas Fortis senior managers are covered by a top-up pension plan, paying a lump sum based on the number of years of service and final salary. This plan is pre-funded at 100% as at 31 December 2019 (96% at 31 December 2018) through insurance companies.

Since 1 January 2015, senior managers benefit from a defined-contribution scheme. The other employees benefit as well from the defined-contribution scheme. Since there is a legal obligation for the employer to guarantee a minimum return on financial assets invested under defined-benefit pension plans, a provision was recognised for these defined-contribution schemes, as this guarantee is not entirely covered by the insurance company.

In France, BNP Paribas pays a top-up banking industry pension arising from rights acquired to 31 December 1993 by retired employees and active employees in service at that date. At 31 December 2019, the Group's residual obligations for these employees were recognised on the balance sheet in full.

The defined-benefit plans previously granted to some Group senior managers have all been closed to new employees and converted into top-up type schemes. The amounts allocated to residual beneficiaries, subject to their presence within the Group at retirement, were fixed when these schemes were closed. At 31 December 2019, 109% of these pension plans were funded through insurance companies (110% at 31 December 2018).

In the United Kingdom, defined-benefit pension plans (pension funds) still exist but are closed to new employees. Under these plans, the defined pension is generally based on final salary and number of years of service. Pension schemes are managed by independent management bodies (Trustees). At 31 December 2019, obligations for all UK entities were 116% covered by financial assets, compared with 115% at 31 December 2018.

In Switzerland, liabilities relate to top-up pension plans based on the principle of defined-contribution schemes with guaranteed returns, paying an annuity under pre-defined terms. These schemes are managed by a foundation. At 31 December 2019, obligations were 91% covered by financial assets, compared with 89% at 31 December 2018.

In the United States, defined-benefit pension plans are based on annual vesting rights to a lump sum comprising a pension expressed as a percentage of annual salary and paying interest at a pre-defined rate. These plans are closed to new entrants and have offered almost no new vesting rights since 2012. At 31 December 2019, the obligation was 82% covered by financial assets, (83% at 31 December 2018).

In Germany, liabilities are mainly related to defined-benefit pension plans, closed to new employees. Under these plans, the defined pension is generally based on the number of years of service and final salary. They offer the payment of an annuity under pre-defined terms. At 31 December 2019, the obligation was 55% covered by financial assets, (59% at 31 December 2018).

In Turkey, the pension plan replaces the national pension scheme (these obligations are measured based on the terms of the eventual transfer to the Turkish State) and offers guarantees exceeding the minimal legal requirements. At the end of 2019, obligations under this plan are fully funded by financial assets held with an external foundation; these financial assets exceed the related obligations, but this surplus is not recognised as an asset by the Group.

Other post-employment benefits

Group employees also receive various other contractual post-employment benefits, such as indemnities payable on retirement, determined according to minimal legal requirements (Labour Code, collective agreements) or according to specific company-level agreements.

In France, the obligations for these benefits are funded through a contract held with a third-party insurer. At 31 December 2019, this obligation was 100% covered by financial assets, compared with 100% at 31 December 2018.

In other countries, the gross obligations of the Group related to these benefits are mainly concentrated in Italy. They are representative of rights vested up to 31 December 2006, when pension reforms changed Italian termination indemnity schemes into defined-contribution plans.

Obligations under defined-benefit plans and other post-employment benefits

➤ ASSETS AND LIABILITIES RECOGNISED ON THE BALANCE SHEET

In millions of euros, at 31 December 2019	*Defined-benefit obligation arising from wholly or partially funded plans*	*Defined-benefit obligation arising from unfunded plans*	Present value of defined-benefit obligation	Fair value of plan assets	Fair value of reimbursement rights[(1)]	Effect of asset ceiling	Net obligation	*of which asset recognised in the balance sheet for defined-benefit plans*	*of which net assets of defined-benefit plans*	*of which fair value of reimbursement rights*	*of which obligation recognised in the balance sheet for defined-benefit plans*
Belgium	*3,208*	*23*	3,231	(113)	(3,001)		117	*(3,001)*		*(3,001)*	*3,118*
UK	*1,737*	*1*	1,738	(2,010)			(272)	*(277)*	*(277)*		*5*
France	*1,189*	*95*	1,284	(1,195)			89	*(77)*	*(77)*		*166*
Switzerland	*1,230*	*2*	1,232	(1,120)		5	117				*117*
USA	*588*	*85*	673	(549)			124				*124*
Italy		*307*	307				307				*307*
Germany	*136*	*70*	206	(114)			92				*92*
Turkey	*146*	*29*	175	(397)		250	28				*28*
Others	*542*	*50*	592	(411)	(1)		180	*(4)*	*(3)*	*(1)*	*184*
TOTAL	***8,776***	***662***	**9,438**	**(5,909)**	**(3,002)**	**255**	**782**	***(3,359)***	***(357)***	***(3,002)***	***4,141***

In millions of euros, at 31 December 2018	*Defined-benefit obligation arising from wholly or partially funded plans*	*Defined-benefit obligation arising from unfunded plans*	Present value of defined-benefit obligation	Fair value of plan assets	Fair value of reimbursement rights[(1)]	Effect of asset ceiling	Net obligation	*of which asset recognised in the balance sheet for defined-benefit plans*	*of which net assets of defined-benefit plans*	*of which fair value of reimbursement rights*	*of which obligation recognised in the balance sheet for defined-benefit plans*
Belgium	*3,049*	*21*	3,070	(93)	(2,838)		139	*(2,838)*		*(2,838)*	*2,977*
UK	*1,488*	*1*	1,489	(1,716)			(227)	*(234)*	*(234)*		*7*
France	*1,193*	*106*	1,299	(1,201)			98	*(61)*	*(61)*		*159*
Switzerland	*1,090*	*9*	1,099	(976)			123				*123*
USA	*538*	*77*	615	(510)			105				*105*
Italy		*357*	357				357				*357*
Germany	*121*	*60*	181	(108)			73				*73*
Turkey	*140*	*29*	169	(366)		226	29				*29*
Others	*503*	*41*	544	(381)	(1)		162	*(6)*	*(5)*	*(1)*	*168*
TOTAL	***8,122***	***701***	**8,823**	**(5,351)**	**(2,839)**	**226**	**859**	***(3,139)***	***(300)***	***(2,839)***	***3,998***

(1) The reimbursement rights are principally found on the balance sheet of the Group's insurance subsidiaries and associated companies – notably AG Insurance with respect to BNP Paribas Fortis' defined-benefit plan – to hedge their commitments to other Group entities that were transferred to them to cover the post-employment benefits of certain employee categories.

CHANGE IN THE PRESENT VALUE OF THE DEFINED-BENEFIT OBLIGATION

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
PRESENT VALUE OF DEFINED-BENEFIT OBLIGATION AT START OF PERIOD	**8,823**	**9,571**
Current service cost	229	236
Interest cost	158	136
Past service cost	(1)	(17)
Settlements	(11)	(32)
Actuarial (gains)/losses on change in demographic assumptions	(56)	(36)
Actuarial (gains)/losses on change in financial assumptions	655	(400)
Actuarial (gains)/losses on experience gaps	9	50
Actual employee contributions	24	24
Benefits paid directly by the employer	(140)	(110)
Benefits paid from assets/reimbursement rights	(377)	(455)
Exchange rate (gains)/losses on obligation	140	(11)
(Gains)/losses on obligation related to changes in the consolidation scope	(15)	(133)
PRESENT VALUE OF DEFINED-BENEFIT OBLIGATION AT END OF PERIOD	**9,438**	**8,823**

CHANGE IN THE FAIR VALUE OF PLAN ASSETS AND REIMBURSEMENT RIGHTS

	Plan assets		Reimbursement rights	
In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018	Year to 31 Dec. 2019	Year to 31 Dec. 2018
FAIR VALUE OF ASSETS AT START OF PERIOD	**5,351**	**5,574**	**2,839**	**2,931**
Expected return on assets	145	103	34	27
Settlements	(3)	(50)		
Actuarial gains/(losses) on assets	439	(56)	168	(64)
Actual employee contributions	14	14	10	10
Employer contributions	63	142	115	141
Benefits paid from assets	(211)	(248)	(166)	(206)
Exchange rate gains/(losses) on assets	127	(67)		
Gains/(losses) on assets related to changes in the consolidation scope	(16)	(61)	2	
FAIR VALUE OF ASSETS AT END OF PERIOD	**5,909**	**5,351**	**3,002**	**2,839**

COMPONENTS OF THE COST OF DEFINED-BENEFIT PLANS

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Service costs	**220**	**237**
Current service cost	229	236
Past service cost	(1)	(17)
Settlements	(8)	18
Net financial expense	**14**	**19**
Interest cost	158	136
Interest income on plan asset	35	13
Interest income on reimbursement rights	(145)	(103)
Expected return on asset ceiling	(34)	(27)
TOTAL RECOGNISED IN SALARY AND EMPLOYEE BENEFIT EXPENSE	**234**	**256**

➤ OTHER ITEMS RECOGNISED DIRECTLY IN EQUITY

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Other items recognised directly in equity	**(6)**	**147**
Actuarial (losses)/gains on plan assets or reimbursement rights	607	(120)
Actuarial (losses)/gains of demographic assumptions on the present value of obligations	56	36
Actuarial (losses)/gains of financial assumptions on the present value of obligations	(655)	400
Experience (losses)/gains on obligations	(9)	(50)
Variation of the effect of assets limitation	(5)	(119)

➤ MAIN ACTUARIAL ASSUMPTIONS USED TO CALCULATE OBLIGATIONS

In the Eurozone, United Kingdom and United States, the Group discounts its obligations using the yields of high quality corporate bonds, with a term consistent with the duration of the obligations.

The ranges of rates used are as follows:

In%	31 December 2019		31 December 2018	
	Discount rate	Compensation increase rate(1)	Discount rate	Compensation increase rate(1)
Belgium	0.10%/1.10%	2.70%/3.20%	0.80%/1.80%	2.90%/3.40%
UK	1.30%/2.10%	2.00%/3.10%	1.80%/3.00%	2.00%/3.55%
France	0.10%/1.10%	1.60%/2.95%	0.40%/1.80%	2.05%/3.30%
Switzerland	0.00%/0.20%	1.00%/2.50%	0.00%/0.90%	1.40%/1.50%
USA	2.35%/3.40%	4.00%	3.50%/4.45%	4.00%
Italy	0.20%/0.80%	1.60%/2.40%	0.80%/1.80%	1.80%/3.10%
Germany	0.50%/1.10%	2.00%/2.50%	1.40%/1.90%	2.00%/3.00%
Turkey	12.51%	7.59%	16.70%	12.20%

(1) Including price increases (inflation).

Observed weighted average rates are as follows:

- in the Eurozone: 0.54% at 31 December 2019 (1.30% at 31 December 2018);
- in the United Kingdom: 2.00% at 31 December 2019 (2.81% at 31 December 2018);
- in Switzerland: 0.15% at 31 December 2019 (0.89% at 31 December 2018).

The impact of a 100 bp change in discount rates on the present value of post-employment benefit obligations is as follows:

Change in the present value of obligations *In millions of euros*	31 December 2019		31 December 2018	
	Discount rate -100bp	Discount rate +100bp	Discount rate -100bp	Discount rate +100bp
Belgium	324	(282)	306	(250)
UK	436	(319)	325	(243)
France	155	(128)	144	(121)
Switzerland	197	(167)	187	(145)
USA	84	(69)	69	(57)
Italy	22	(20)	26	(25)
Germany	47	(36)	37	(28)
Turkey	12	(10)	15	(12)

ACTUAL RATE OF RETURN ON PLAN ASSETS AND REIMBURSEMENT RIGHTS OVER THE PERIOD

In%	Year to 31 Dec. 2019		Year to 31 Dec. 2018	
	Range of value (reflecting the existence of several plans in the same country)	Weighted average rates	*Range of value (reflecting the existence of several plans in the same country)*	Weighted average rates
Belgium	-0.05%/19.10%	6.05%	-2.00%/4.65%	-0.43%
UK	3.95%/19.00%	15.65%	-3.80%/5.70%	-3.05%
France	3.35%/3.45%	3.45%	3.55%	3.55%
Switzerland	2.40%/14.85%	10.90%	-2.00%/2.80%	-0.66%
USA	7.75%/18.00%	13.10%	-4.55%/1.50%	-0.50%
Germany	1.75%/9.75%	9.05%	-6.50%/1.80%	-3.23%
Turkey	19.25%	19.25%	13.10%	13.10%

BREAKDOWN OF PLAN ASSETS

In%	31 December 2019						31 December 2018					
	Shares	Govern-mental bonds	Non-Govern-mental bonds	Real-estate	Deposit account	Others	Shares	Govern-mental bonds	Non-Go-vernmental bonds	Real-estate	Deposit account	Others
Belgium	6%	54%	15%	1%	0%	24%	6%	52%	19%	1%	0%	22%
UK	14%	66%	8%	0%	4%	8%	16%	63%	9%	0%	3%	9%
France[(1)]	6%	69%	17%	8%	0%	0%	7%	67%	18%	8%	0%	0%
Switzerland	34%	0%	29%	19%	5%	13%	31%	29%	4%	20%	1%	15%
USA	26%	44%	17%	0%	9%	4%	26%	44%	14%	0%	11%	5%
Germany	26%	64%	0%	0%	1%	9%	28%	61%	0%	0%	2%	9%
Turkey	0%	0%	49%	4%	42%	5%	0%	0%	0%	5%	94%	1%
Others	9%	14%	12%	1%	3%	61%	10%	11%	12%	1%	6%	60%
GROUP	**13%**	**47%**	**17%**	**4%**	**4%**	**15%**	**13%**	**49%**	**13%**	**4%**	**6%**	**15%**

(1) In France, the breakdown of plan assets reflects the breakdown of the general fund of the insurance company through which the Group's obligations are funded.

The Group introduced an asset management governance for assets backing defined-benefit pension plan commitments, the main objectives of which are the management and control of the risks in terms of investment.

It sets out investment principles, in particular, by defining an investment strategy for plan assets, based on financial objectives and financial risk management, to specify the way in which plan assets have to be managed, via financial management servicing contracts.

The investment strategy is based on an assets and liabilities management analysis that should be realised at least every three years for plans with assets in excess of EUR 100 million.

Post-employment healthcare benefits

The Group offers some healthcare benefit plans for retired employees, mainly in the United States and Belgium. These plans are mainly closed to new entrants.

The present value of post-employment healthcare benefit obligations stood at EUR 146 million at 31 December 2019, compared with EUR 131 million at 31 December 2018, i.e. an increase of EUR 15 million in 2019, of which +EUR 10 million recognised directly in shareholders' equity.

7.c OTHER LONG-TERM BENEFITS

BNP Paribas offers its employees various long-term benefits, mainly long-service awards, the ability to save up paid annual leave in time savings accounts, and certain guarantees protecting them in the event they become incapacitated. The net provision amounted to EUR 448 million at 31 December 2019 (EUR 462 million at 31 December 2018).

As part of the Group's variable compensation policy, annual deferred compensation plans are set up for certain high-performing employees or pursuant to special regulatory frameworks. Under these plans, payment is deferred over time and is subject to the performance achieved by the business lines, divisions and Group.

Since 2013, BNP Paribas has introduced a Group loyalty scheme with a cash payment, at the end of a three-year vesting period, which fluctuates according to the Group's intrinsic performance. The aim of this loyalty scheme is to make different categories of managerial staff partners in the Group's development and profitability objectives. These personnels are representative of the Group's talent and the breadth of its managerial framework i.e. senior managers, managers in key positions, line managers and experts, high-potential managers, high-performing young executives with good career development prospects and key contributors to the Group's results.

The amounts allocated under this plan are linked to changes in the Group's operational performance over three years (for 80%) and to the achievement of the Group's corporate social responsibility (CSR) targets (for 20%). These nine targets are in line with the four pillars on which the Group's CSR policy is based. In addition, the final payment is subject to continuous service within the Group between the grant date and the payment date, provided that the Group's operating income and pre-tax income for the year prior to payment are strictly positive. For employees subject to special regulatory frameworks, this loyalty scheme is adjusted in accordance with the CRD4 European Directive.

The net obligation related to deferred compensation plans and loyalty schemes amounts to EUR 651 million at 31 December 2019 (EUR 579 million at 31 December 2018).

In millions of euros	31 December 2019	31 December 2018
Net provisions for other long-term benefits	**1,099**	**1,040**
Asset recognised in the balance sheet under the other long-term benefits	(89)	(80)
Obligation recognised in the balance sheet under the other long-term benefits	1,188	1,120

7.d TERMINATION BENEFITS

BNP Paribas has implemented a number of voluntary redundancy plans and headcount adaptation plans for employees who meet certain eligibility criteria. The obligations to eligible active employees under such plans are provided for as soon as a bilateral agreement or a bilateral agreement proposal for a particular plan is made.

In millions of euros	31 December 2019	31 December 2018
Provision for voluntary departure, early retirement plans, and headcount adaptation plans	513	380

7.e SHARE-BASED PAYMENTS

BNP Paribas set up a Global Share-Based Incentive Plan for some Group employees, including stock options and performance share awards. Last attributions under this plan were made in 2012.

Furthermore, some deferred compensation plans are index-linked to BNP Paribas share price. Especially for employees whose activities are likely to have an impact on the Group risk exposure.

Expense of share-based payments

Expense/(revenue) in millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Prior deferred compensation plans	84	(204)
Deferred compensation plans for the year	372	195
TOTAL	**456**	**(9)**

Deferred share price-linked, cash-settled compensation plans

As part of the Group's variable remuneration policy, deferred annual compensation plans offered to certain high-performing employees or set up pursuant to special regulatory frameworks may entitle beneficiaries to variable compensation settled in cash but linked to the share price, payable over several years.

Variable compensation for employees, subject to special regulatory frameworks

Since the publication of the Decree by the French ministry of finance on 13 December 2010, and following the provisions of the European Directive CRD4 of 26 July 2013 transposed into the French law in the Monetary and Financial Code by the Order of 20 February 2014 as well as the Decrees and Orders of 3 November 2014 and the delegated European regulation of 4 March 2014, the variable compensation plans apply to Group employees performing activities that may have a material impact on the Group's risk profile.

Under these plans, payment is deferred over time and is contingent on the performance achieved by the business lines, core businesses and Group.

Sums will mostly be paid in cash linked to the increase or decrease in the BNP Paribas share price.

Deferred variable compensation for other Group employees

Sums due under the annual deferred compensation plans for high-performing employees are partly paid in cash linked to the increase or decrease in the BNP Paribas share price.

Global Share-Based Incentive Plan (until 2012)

➤ STOCK OPTION PLANS

On 4 March 2019, the last stock option plan expired.

Characteristics of the plan							Options outstanding at end of period	
Originating company	Date of grant	Number of grantees	Number of options granted	Start date of exercise period	Option expiry date	Adjusted exercise price (in euros)	Number of options	Remaining period until expiry of options (years)
BNP Paribas SA	04/03/2011	1,915	2,296,820	04/03/2015	04/03/2019	56.45		
TOTAL OPTIONS OUTSTANDING AT END OF PERIOD							**-**	-

➤ MOVEMENTS OVER THE PAST TWO YEARS

	Year to 31 Dec. 2019		Year to 31 Dec. 2018	
	Number of options	Weighted average exercise price *(in euros)*	Number of options	Weighted average exercise price *(in euros)*
OPTIONS OUTSTANDING AT 1 JANUARY	**1,296,508**	**58.25**	**2,277,443**	**55.61**
Options exercised during the period			(939,175)	52.07
Options expired during the period	(1,296,508)		(41,760)	
OPTIONS OUTSTANDING AT 31 DECEMBER	**-**	**-**	**1,296,508**	**58.25**
OPTIONS EXERCISABLE AT 31 DECEMBER	**-**	**-**	**1,296,508**	**58.25**

➤ PERFORMANCE SHARE PLANS

At 31 December 2019, 206 BNP Paribas SA shares granted via performance share plans were not yet delivered to their beneficiaries.

Note 8 ADDITIONAL INFORMATION

8.a CHANGES IN SHARE CAPITAL AND EARNINGS PER SHARE

At 31 December 2019, the share capital of BNP Paribas SA amounted to EUR 2,499,597,122, and was divided into 1,249,798,561 shares. The nominal value of each share is EUR 2, unchanged from 31 December 2018.

Ordinary shares issued by BNP Paribas and held by the Group

	Proprietary transactions		Trading transactions(1)		Total	
	Number of shares	Carrying amount *(in millions of euros)*	Number of shares	Carrying amount *(in millions of euros)*	Number of shares	Carrying amount *(in millions of euros)*
Shares held at 31 December 2017	**807,742**	**43**	**(158,177)**	**(10)**	**649,565**	**33**
Acquisitions	513,568	31			513,568	31
Disposals	(594,068)	(36)			(594,068)	(36)
Shares delivered to employees	(791)				(791)	
Other movements			1,649,512	69	1,649,512	69
Shares held at 31 December 2018	**726,451**	**38**	**1,491,335**	**59**	**2,217,786**	**97**
Net movements			(1,010,265)	(34)	(1,010,265)	(34)
Shares held at 31 December 2019	**726,451**	**38**	**481,070**	**25**	**1,207,521**	**63**

(1) Transactions realised in the framework of an activity of trading and arbitrage transactions on equity indices.

At 31 December 2019, the BNP Paribas Group was a holder of 1,207,521 BNP Paribas shares representing an amount of EUR 63 million, which was recognised as a decrease in equity.

From 1 January 2019 to 31 December 2019, no performance shares have been delivered.

Preferred shares and Undated Super Subordinated Notes eligible as Tier 1 regulatory capital

Preferred shares issued by the Group's foreign subsidiaries

BNP Paribas Personal Finance made in 2004 two issues of undated non-voting preferred shares through a structured entity governed by UK law and which is exclusively controlled. Since the first call date, these preferred shares are redeemable at par at the issuer's discretion at each quarterly coupon date.

Issuer	Date of issue	Currency	Amount *(in millions of euros)*	Rate and term before 1st call date		Rate after 1st call date
Cofinoga Funding II LP	January and May 2004	EUR	80	TEC 10(1) +1.35%	10 years	TEC 10(1) +1.35%
TOTAL AT 31 DECEMBER 2019			**73(2)**			

(1) TEC 10 is the daily long-term government bond index, corresponding to the yield-to-maturity of a fictitious 10-year Treasury note.
(2) Value at the date of acquisition of control over the LaSer group.

These issues and the related dividends are recorded under "Minority interests" in the balance sheet.

Undated Super Subordinated Notes issued by BNP Paribas SA

BNP Paribas has issued Undated Super Subordinated Notes which pay a fixed, fixed adjustable or floating rate coupon and are redeemable at the end of a fixed period and thereafter at each coupon date or every five years. If the notes are not redeemed at the end of this period, some of these issues will pay a coupon indexed to Euribor, Libor or a swap rate or a fixed-rate coupon.

On 2 July 2018, BNP Paribas SA redeemed the June 2008 issue for a total amount of EUR 500 million, at the first call date. These notes paid a 7.781% fixed-rate coupon.

On 16 August 2018, BNP Paribas SA has issued Undated Super Subordinated Notes for an amount of USD 750 million which pay a 7% fixed-rate coupon. These notes could be redeemed at the end of a period of 10 years. If the notes are not redeemed in 2028, a 5-year dollar swap rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 18 September 2018, BNP Paribas SA redeemed the September 2008 issue for an amount of EUR 100 million, at the first call date. These notes paid a 7.57% fixed-rate coupon.

On 25 March 2019, BNP Paribas SA has issued Undated Super Subordinated Notes for an amount of USD 1,500 million which pay a 6.625% fixed-rate coupon. These notes could be redeemed at the end of a period of 5 years. If the notes are not redeemed in 2024, a 5-year dollar swap rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 10 July 2019, BNP Paribas SA has issued Undated Super Subordinated Notes for an amount of AUD 300 million which pay a 4.5% fixed-rate coupon. These notes could be redeemed at the end of a period of 5 years and a half. If the notes are not redeemed in 2025, a 5-year Australian dollar swap rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 17 October 2019, BNP Paribas SA redeemed the October 2005 issue, for an amount of EUR 1,000 million. These notes paid a 4.875% fixed-rate coupon.

On 20 November 2019, BNP Paribas SA redeemed the October 2009 issue, for an amount of EUR 1 million, before the first call date. These notes paid a 7.384% fixed-rate coupon.

On 29 December 2019, BNP Paribas SA redeemed two December 2009 issues at the first call date, for a respective amount of EUR 17 million and EUR 2 million. These notes paid respectively a 7.028% fixed-rate coupon and a 3-month Euribor rate coupon.

On 30 December 2019, BNP Paribas SA redeemed the December 2009 issue, for an amount of USD 70 million, at the first call date. These notes paid a USD 3-month Libor rate coupon.

The following table summarises the characteristics of these various issues:

Date of issue	Currency	Amount *(in millions of currency units)*	Coupon payment date	Rate and term before 1st call date		Rate after 1st call date
October 2005	USD	400	annual	6.250%	6 years	6.250%
July 2006	EUR	150	annual	5.450%	20 years	3-month Euribor +1.920%
June 2007	USD	600	quarterly	6.500%	5 years	6.500%
June 2007	USD	1,100	semi-annual	7.195%	30 years	USD 3-month Libor +1.290%
June 2015	EUR	750	semi-annual	6.125%	7 years	EUR 5-year swap +5.230%
August 2015	USD	1,500	semi-annual	7.375%	10 years	USD 5-year swap +5.150%
March 2016	USD	1,500	semi-annual	7.625%	5 years	USD 5-year swap +6.314%
December 2016	USD	750	semi-annual	6.750%	5.25 years	USD 5-year swap +4.916%
November 2017	USD	750	semi-annual	5.125%	10 years	USD 5-year swap +2.838%
August 2018	USD	750	semi-annual	7.000%	10 years	USD 5-year swap +3.980%
March 2019	USD	1,500	semi-annual	6.625%	5 years	USD 5-year swap +4.149%
July 2019	AUD	300	semi-annual	4.500%	5.5 years	AUD 5-year swap +3.372%
TOTAL EURO-EQUIVALENT HISTORICAL VALUE AT 31 DECEMBER 2019		**8,689**(1)				

(1) Net of shares held in treasury by Group entities.

BNP Paribas has the option of not paying interest due on these Undated Super Subordinated Notes. Unpaid interest is not carried forward.

For the notes issued before 2015, the absence of coupon payment is conditional on the absence of dividend payment on BNP Paribas SA ordinary shares or on Undated Super Subordinated Note equivalents during the previous year. Interest due is payable once dividend payment on BNP Paribas SA ordinary shares resumes.

The contracts relating to these Undated Super Subordinated Notes contain a loss absorption clause. Under the terms of this clause, in the event of insufficient regulatory capital, the nominal value of the notes may be reduced in order to serve as a new basis for the calculation of the related coupons until the capital deficiency is made up and the nominal value of the notes is increased to its original amount.

The proceeds from these issues are recorded in equity under "Capital and retained earnings". In accordance with IAS 21, issues denominated in foreign currencies are recognised at their historical value based on their translation into euros at the issue date. Interest on the instruments is treated in the same way as dividends.

At 31 December 2019, the BNP Paribas Group held EUR 1 million of Undated Super Subordinated Notes which were deducted from shareholders' equity.

Earnings per share

Basic earnings per share are calculated by dividing the net income for the period attributable to holders of ordinary shares by the weighted average number of ordinary shares outstanding during the period. The net income attributable to ordinary shareholders is determined by deducting the net income attributable to holders of preferred shares.

Diluted earnings per share correspond to the net income for the period attributable to holders of ordinary shares, divided by the weighted average number of shares outstanding as adjusted for the maximum effect of the conversion of dilutive equity instruments into ordinary shares. In-the-money stock subscription options are taken into account in the diluted earnings per share calculation, as are performance shares granted under the Global Share-based Incentive Plan. Conversion of these instruments would have no effect on the net income figure used in this calculation.

	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Net profit used to calculate basic and diluted earnings per ordinary share *(in millions of euros)*(1)	7,745	7,159
Weighted average number of ordinary shares outstanding during the year	1,247,993,812	1,248,334,552
Effect of potentially dilutive ordinary shares (Performance share attribution plan)	206	311
Weighted average number of ordinary shares used to calculate diluted earnings per share	1,247,994,018	1,248,334,863
Basic earnings per share *(in euros)*	6.21	5.73
Diluted earnings per share *(in euros)*	6.21	5.73

(1) The net profit used to calculate basic and diluted earnings per share is the net profit attributable to equity shareholders, adjusted for the remuneration on the Undated Super Subordinated Notes issued by BNP Paribas SA (treated as preferred share equivalents), which for accounting purposes is handled as dividends, as well as the related foreign exchange gain or loss impact recognised directly in shareholders' equity in case of repurchase.

The dividend per share paid in 2019 out of the 2018 net income amounted to EUR 3.02, unchanged from the dividend paid in 2018 out of the 2017 net income.

8.b CONTINGENT LIABILITIES: LEGAL PROCEEDINGS AND ARBITRATION

BNP Paribas (the "Bank") is party as a defendant in various claims, disputes and legal proceedings (including investigations by judicial or supervisory authorities) in a number of jurisdictions arising in the ordinary course of its business activities, including inter alia in connection with its activities as market counterparty, lender, employer, investor and taxpayer. While the Bank cannot predict the ultimate outcome of all pending and threatened legal and regulatory proceedings, the Bank reasonably believes that they are either without legal merit, can be successfully defended or that the outcome of these actions is not expected to result in a significant loss for the Bank.

The Bank and certain of its subsidiaries are defendants in several actions pending before the United States Bankruptcy Court Southern District of New York brought by the Trustee appointed for the liquidation of Bernard L. Madoff Investment Securities LLC ("BLMIS"). These actions, known generally as "clawback claims", are similar to those brought by the BLMIS Trustee against numerous institutions, and seek recovery of amounts allegedly received by the BNP Paribas entities from BLMIS or indirectly through BLMIS-related "feeder funds" in which BNP Paribas entities held interests. The BLMIS Trustee claims in these actions that the amounts which BNP Paribas entities received are avoidable and recoverable under the U.S. Bankruptcy Code and New York state law. In the aggregate, the amount initially sought to be recovered in these actions approximated USD 1.3 billion. BNP Paribas has substantial and credible defenses to these actions and is defending against them vigorously.

In two decisions dated 22 November 2016 and 3 October 2018, the Bankruptcy Court rejected most of the claims brought by the BLMIS Trustee against BNP Paribas entities. On 25 February 2019 the United States Court of Appeals for the Second Circuit reversed the Bankruptcy Court's 22 November 2016 decision. On 8 April 2019, the defendants affected by the appeal, including the affected BNP Paribas entities, notified the Second Circuit of their intent to seek further review by the U.S. Supreme Court. The 3 October 2018 decision will be subject to appeal at the conclusion of that suit.

Various litigations and investigations are or were ongoing relating to the restructuring of the Fortis group, now Ageas, of which BNP Paribas Fortis is no longer part, and to events having occurred before BNP Paribas Fortis became part of the BNP Paribas Group. Among these are litigations brought by shareholders groups in The Netherlands and Belgium against Ageas and, among others, against BNP Paribas Fortis, in relation to its role as global coordinator of Fortis (now Ageas)'s capital increase in October 2007 to partly finance its acquisition of ABN Amro Bank N.V.. These shareholders groups mainly allege that there has been a breach in financial communication, regarding, inter alia, the disclosure on the exposure to subprime mortgages. On 13 July 2018, the Amsterdam Court of Appeal has declared binding a settlement between Ageas and representatives of certain shareholders groups who held shares between 28 February 2007 and 14 October 2008. The settlement has become final with the decision of Ageas on 20 December 2018 to waive its termination right.

BNP Paribas Fortis is one of the releasees under the Ageas Settlement. This means that each eligible shareholder who has not opted out prior to 31 December 2018 will be deemed to have fully released BNP Paribas Fortis from any claim regarding the events during this time. The number of "opt out" is limited.

Litigation was also brought in Belgium by minority shareholders of Fortis against the Société fédérale de Participations et d'Investissement, Ageas and BNP Paribas seeking (amongst other things) damages from BNP Paribas as restitution for part of the BNP Paribas Fortis shares that were contributed to BNP Paribas in 2009, on the ground that the transfer of these shares was null and void. On 29 April 2016 the Brussels Commercial court decided to stay the proceedings until the resolution of the pending Fortis criminal proceeding in Belgium. BNP Paribas does not have tangible elements to assess the duration of such suspension. The Public Prosecutor has stated on 20 December 2018 that he sees no reason to request the Council's chamber of the Court to order a referral.

Like many other financial institutions in the banking, investment, mutual funds and brokerage sectors, the Bank has received or may receive requests for information from supervisory, governmental or self-regulated agencies. The Bank responds to such requests, and cooperates with the relevant authorities and regulators and seeks to address and remedy any issues they may raise.

Regulatory and law enforcement authorities in multiple jurisdictions are conducting investigations or making inquiries of a number of financial institutions regarding trading on the foreign exchange markets. The Bank has been cooperating with the investigations and inquiries and has responded to the information requests. On 25 January 2018, BNP Paribas USA Inc. accepted to plead guilty in front of the U.S. District Court for the Southern District of New York to a single violation of the Sherman Antitrust Act. On 30 May 2018, the court imposed the sentence, as jointly recommended in the plea agreement between BNP Paribas USA Inc. and the Department of Justice ("DOJ"), consisting of (1) a fine of USD 90 million; (2) no probation, and (3) no order of restitution. In reaching the plea agreement with BNP Paribas USA Inc., the DOJ has noted the Bank's substantial efforts relating to compliance and remediation to address and prevent the re-occurrence through its compliance and remediation program of the issues arising from its FX trading business.

The U.S. regulatory and law enforcement authorities are currently investigating or requesting information in relation to certain activities as reported in the international financial press in relation to the U.S. treasuries market and U.S. Agency bonds. The Bank, which has received some requests for information, is cooperating with investigations and is responding to requests for information. The outcome and potential impact of these investigations or requests for information is difficult to predict before their close and the subsequent discussions with the U.S. authorities. It should be noted that it has been reported that a number of financial institutions are involved in these investigations or requests for information and that it is sometimes the case that reviews carried out in connection therewith may lead to settlements including in particular the payment of fines or significant penalties depending on the circumstances specific to each situation.

On 26 February 2020, the Paris Tribunal correctionnel found BNP Paribas Personal Finance guilty of misleading commercial practice and concealment of this practice. BNP Paribas Personal Finance is ordered to pay a fine of EUR 187,500. The Court ordered the publication of the judgment in certain French newspapers. BNP Paribas Personal Finance is ordered to pay damages and attorney expenses to the victims, including three consumer associations. The damages award is effective immediately. BNP Paribas Personal Finance is considering an appeal.

8.c BUSINESS COMBINATIONS AND LOSS OF CONTROL OR SIGNIFICANT INFLUENCE

State Bank of India Life Insurance Co Ltd

During the first half of 2019, three consecutive disposals of 9.2%, 5.1% and 2.5% of the capital of State Bank of India Life Insurance Co Ltd (SBI life) took place on the Indian Market.

On 30 June 2019, the Group ceased to exercise a significant influence on SBI Life.

The residual stake of 5.2% held by BNP Paribas Cardif Holding, is henceforth recorded in the available-for-sale financial assets.

These operations generated an overall gain of EUR 1,450 million before tax, recognised in "Net gain on non-current assets".

First Hawaiian Inc

On 4 August 2016, BNP Paribas Group launched an initial public offering on its First Hawaiian Inc (FHI) subsidiary on the US market.

Subsequently, five partial sales were made.

Date	Transaction	Interest sold	Residual interest	Control / Significant influence
4 August 2016	Initial offering	17.4%	82.6%	Control
6 February 2017	1st secondary offering	20.6%	62.0%	Control
8 May 2018	2nd secondary offering	13.2%	48.8%	Control
31 July 2018	3rd secondary offering	15.5%	33.3%	Significant influence
5 September 2018	4th secondary offering	14.9%	18.4%	Significant influence
29 January 2019	5th secondary offering	18.4%	0%	Significant influence
31 DÉCEMBRE 2019		**100%**	**0%**	

The first three operations resulted in an increase in the Group's retained earnings of EUR 422 million and in minority interests of EUR 1,363 million.

As at 30 June 2018, the Group considered the loss of control within one year to be highly probable and applied the provisions of IFRS 5 on groups of assets and liabilities held for sale.

The application of IFRS 5 had the effect of splitting the BancWest cash-generating units and, as a result, the related goodwill (i.e. EUR 4.3 billion) between Bank of the West (BoW) and FHI. This split was determined based on the recoverable amounts of the First Hawaiian Bank and BoW activities, and led to the allocation of a EUR 1.3 billion goodwill to FHI.

In addition, assets and liabilities have been reclassified respectively as non-current assets held for sale and liabilities related to non-current assets held for sale.

Following the sale realized on 31 July 2018, the Group ceased to exercise exclusive control over FHI but retained a significant influence. This loss of control resulted in a decrease of EUR 17.4 billion in the Group's balance sheet and a decrease in retained earnings attributable to minority shareholders of EUR -1,473 million.

This operation and the last partial sale generated an overall gain of EUR 286 million before tax, recognised in the profit and loss acount.

As at 31 December 2018, the Group continues to apply the provisions of IFRS 5.

The effect of IFRS 5 is to assess the equity-method value at the balance sheet date at the lowest value between the book value and the market value. At 31 December 2018, this method resulted in the recognition of a EUR -125 million impairment.

On 29 January 2019, the Group launched a secondary offering for 24.9 million ordinary shares of First Hawaiian Inc (FHI). As a result of this transaction, the BNP Paribas Group has sold its entire 18.4% stake in FHI.

This operation generated an overall gain of EUR 82 million before tax, recognised in the profit and loss account.

ABN Amro Bank Luxembourg

On 3 September 2018, BGL BNP Paribas acquired 100% of ABN Amro Bank Luxembourg (Private Banking activity) and its subsidiary ABN Amro Life SA (insurance activity). As a result of this transaction, the BNP Paribas Group fully consolidates these activities.

The result of this acquisition is to increase the Group's balance sheet at acquisition date by EUR 5.1 billion, including loans and advances to customers for EUR 1.6 billion and financial investments of insurance activities for EUR 2.7 billion.

The goodwill linked to this operation amounts to EUR 37 million.

As at 31 December 2018, ABN Amro Bank Luxembourg merged into BGL BNP Paribas.

Raiffeisen Bank Polska

On 31 October 2018, Bank BGZ BNP Paribas bought the "Core" banking activities of Raiffeisen Bank Polska from Raiffeisen Bank International.

This acquisition resulted in an increase in the Group's balance sheet at acquisition date of EUR 9.5 billion, including loans and advances to customers for EUR 4.3 billion and amortised-cost debt securities for EUR 3.9 billion.

The negative goodwill associated with this operation amounts to EUR 68 million.

8.d MINORITY INTERESTS

In millions of euros	Capital and retained earnings	Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	Minority interests
Capital and re tained earnings at 1st January 2018	**5,315**	**(27)**	**(162)**	**5,126**
Appropriation of net income for 2017	(160)			(160)
Increases in capital and issues	4			4
Remuneration on preferred shares	(2)			(2)
Impact of internal transactions on minority shareholders	(6)			(6)
Movements in consolidation scope impacting minority shareholders	(1,454)	36	119	(1,299)
Acquisitions of additional interests or partial sales of interests	326	(9)	(10)	307
Change in commitments to repurchase minority shareholders' interests	(165)			(165)
Other movements	11			11
Changes in assets and liabilities recognised directly in equity		17	(21)	(4)
Net income for 2018	479			479
Interim dividend payments	(32)			(32)
Capital and retained earnings at 31 December 2018	**4,316**	**17**	**(74)**	**4,259**
Effect of IFRS 16 first time adoption (note 2)	(5)			(5)
Capital and re tained earnings at 1st January 2019	**4,311**	**17**	**(74)**	**4,254**
Appropriation of net income for 2018	(227)			(227)
Increases in capital and issues	10			10
Remuneration on preferred shares and undated super subordinated notes	(1)			(1)
Impact of internal transactions on minority shareholders	1			1
Acquisitions of additional interests or partial sales of interests	1			1
Change in commitments to repurchase minority shareholders' interests	(64)			(64)
Other movements	1			1
Changes in assets and liabilities recognised directly in equity	-		7	7
Net income for 2019	410			410
Capital and retained earnings at 31 December 2019	**4,442**	**17**	**(67)**	**4,392**

Main minority interests

The assessment of the material nature of minority interests is based on the contribution of the relevant subsidiaries to the Group balance sheet (before elimination of intra-group balances and transactions) and to the Group profit and loss account.

	31 December 2019	Year to 31 Dec. 2019						
In millions of euros	Total assets before elimination of intra-group transactions	Revenues	Net income	Net income and changes in assets and liabilities recognised directly in equity	Minority shareholders' interest (%)	Net income attributable to minority interests	Net income and changes in assets and liabilities recognised directly in equity - attributable to minority interests	Dividends paid to minority shareholders
Contribution of the entities belonging to the BGL BNP Paribas Group	89,384	1,668	532	569	34%	157	164	87
Other minority interests						253	253	141
TOTAL						**410**	**417**	**228**

	31 December 2018	Year to 31 Dec. 2018						
In millions of euros	Total assets before elimination of intra-group transactions	Revenues	Net income	Net income and changes in assets and liabilities recognised directly in equity	Minority shareholders' interest (%)	Net income attributable to minority interests	Net income and changes in assets and liabilities recognised directly in equity - attributable to minority interests	Dividends paid to minority shareholders
Contribution of the entities belonging to the BGL BNP Paribas Group	84,655	1,519	451	397	34%	145	121	61
Other minority interests						334	354	133
TOTAL						**479**	**475**	**194**

There are no particular contractual restrictions on the assets of BGL BNP Paribas Group related to the presence of the minority shareholder

➤ INTERNAL RESTRUCTURING THAT LED TO A CHANGE IN MINORITY SHAREHOLDERS' INTEREST IN THE EQUITY OF SUBSIDIARIES

No significant internal restructuring operation occurred in 2019, nor in 2018.

➤ ACQUISITIONS OF ADDITIONAL INTERESTS AND PARTIAL SALES OF INTERESTS LEADING TO CHANGES IN MINORITY INTERESTS IN THE EQUITY OF SUBSIDIARIES

	Year to 31 Dec. 2019		Year to 31 Dec. 2018	
In millions of euros	Attributable to shareholders	Minority interests	Attributable to shareholders	Minority interests
BNP Paribas 3 Step IT (ex Arius)				
Partial disposal, reducing the Group's share to 51%	16	4		
Bank BGZ BNP Paribas				
Dillutive capital increase, reducing the Group's share to 88.75%			(3)	102
Cardif Lux Vie				
Additional acquisition of 33.3% of the shares of Cardif Lux Vie			(55)	(97)
Cardif Life Insurance Japan				
Sale of 25% of the shares of Cardif Life Insurance Japan in the framework of entities restructuring in Japan	2	(2)	17	76
Austin Finance				
Accretive capital decrease, bringing the Group's share to 100%				(82)
First Hawaiian Inc (note 8.c)				
On 8 May 2018, third offer on First Hawaiian Inc for 12.1% of its capital, at a 28.35-dollar price per share, and a capital decrease of 1.1%.			85	315
Cardif IARD				
Dilutive capital increase, which reduced the Group's interest to 66%			30	20
Other		(1)	(3)	(8)
TOTAL	**18**	**1**	**71**	**326**

Commitments to repurchase minority shareholders' interests

In connection with the acquisition of certain entities, the Group granted minority shareholders put options on their holdings.

The total value of these commitments, which are recorded as a reduction in shareholders' equity, amounts to EUR 556 million at 31 December 2019, compared with EUR 540 million at 31 December 2018.

8.e SIGNIFICANT RESTRICTIONS IN SUBSIDIARIES, JOINT VENTURES AND ASSOCIATES

Significant restrictions related to the ability of entities to transfer cash to the Group

The ability of entities to pay dividends or to repay loans and advances depends, *inter alia*, on local regulatory requirements for capitalisation and legal reserves, as well as the entities' financial and operating performance. During 2018 and 2019, no BNP Paribas Group entity was subject to significant restrictions other than those related to regulatory requirements.

Significant restrictions relative to the Group's ability to use the assets lodged in consolidated structured entities

Access to the assets of consolidated structured entities in which third-party investors have invested is limited inasmuch as these entities' assets are reserved for the holders of units or securities. These assets total EUR 38 billion as at 31 December 2019 (EUR 31 billion as at 31 December 2018).

Significant restrictions related to the Group's ability to use assets pledged as collateral or under repurchase agreements

The financial instruments pledged by the BNP Paribas Group as collateral or under repurchase agreements are presented in notes 5.r and 6.d.

Significant restrictions related to liquidity reserves

Significant restrictions related to liquidity reserves correspond to the mandatory deposits placed with central banks presented in chapter 5 of the Universal registration document under *Liquidity risk*.

Assets representative of unit-linked insurance contracts

Financial assets representative of unit-linked insurance contracts designated as at fair value through profit or loss, which amount to EUR 71 billion as at 31 December 2019 (compared with EUR 62 billion as at 31 December 2018), are held for the benefit of the holders of these contracts.

8.f STRUCTURED ENTITIES

The BNP Paribas Group is engaged in transactions with sponsored structured entities mainly through its activities of securitisation of financial assets – as either originator or sponsor –, fund management and specialised asset financing.

In addition, the BNP Paribas Group is also engaged in transactions with structured entities that it has not sponsored, notably in the form of investments in funds or securitisation vehicles.

The method for assessing control for structured entities is detailed in Note 1.b.2. *Consolidation methods*.

Consolidated structured entities

The main categories of consolidated structured entities are:

ABCP (Asset-Backed Commercial Paper) conduits: the ABCP securitisation conduits Starbird, Matchpoint and Scaldis fund securitisation transactions managed by the BNP Paribas Group on behalf of its customers. Details on how these are financed and the Group's risk exposure are presented in chapter 5 of the Universal registration document under *Securitisation as (sponsor) on behalf of clients / Short-term refinancing*.

Proprietary securitisation: proprietary securitisation positions originated and held by the BNP Paribas Group are detailed in chapter 5 of the Universal registration document under *Proprietary securitisation activities (originator)*.

Funds managed by the Group: the BNP Paribas Group structures different types of funds for which it may act as fund manager, investor, custodian or guarantor. These funds are consolidated when the Group is both the manager and a significant investor, and is therefore exposed to variable returns.

Unconsolidated structured entities

The BNP Paribas Group has entered into relations with unconsolidated structured entities in the course of its business activities to meet the needs of its customers.

Information relative to interests in sponsored structured entities

The main categories of unconsolidated sponsored structured entities are as follows:

Securitisation: the BNP Paribas Group structures securitisation vehicles for the purposes of offering customers financing solutions for their assets, either directly or through consolidated ABCP conduits. Each vehicle finances the purchase of customers' assets (receivables, bonds, etc.) primarily by issuing bonds backed by these assets and whose redemption is linked to their performance.

Funds: the Group structures and manages funds to offer investment opportunities to its customers. Dedicated or public funds are offered to institutional and individual customers, and are distributed and commercially monitored by the BNP Paribas Group. The entities of the BNP Paribas Group responsible for managing these funds may receive management fees and performance commission. The BNP Paribas Group may hold units in these funds, as well as units in funds dedicated to the insurance activity not managed by the BNP Paribas Group.

Asset financing: the BNP Paribas Group establishes and finances structured entities that acquire assets (aircraft, ships, etc.) intended for lease, and the lease payments received by the structured entity are used to repay the financing, which is guaranteed by the asset held by the structured entity. The scope of entities included in this category was refined in 2018.

Other: on behalf of its customers, the Group may also structure entities which invest in assets or are involved in debt restructuring.

An interest in an unconsolidated structured entity is a contractual or non-contractual link that exposes the BNP Paribas Group to variable returns from the performance of the entity.

The Group's assets and liabilities related to the interests held in sponsored structured entities are as follows:

In millions of euros, at 31 December 2019	Securitisation	Funds	Asset Financing	Others	Total
INTERESTS ON THE GROUP BALANCE SHEET					
ASSETS					
Financial instruments at fair value through profit or loss	161	339	1	3,129	3,630
Derivatives used for hedging purposes	93	680	88	38	899
Financial instruments at fair value through equity	294				294
Financial assets at amortised cost	15,784	117	891	9	16,801
Other assets		192	1	4	197
Financial investments of insurance activities		14,710			14,710
TOTAL ASSETS	**16,332**	**16,038**	**981**	**3,180**	**36,531**
LIABILITIES					
Financial instruments at fair value through profit or loss	65	619		3,787	4,471
Derivatives used for hedging purposes					-
Financial liabilities at amortised cost	1,255	9,033	207	795	11,290
Other liabilities	2	188	68	3	261
TOTAL LIABILITIES	**1,322**	**9,840**	**275**	**4,585**	**16,022**
MAXIMUM EXPOSURE TO LOSS	**22,932**	**16,630**	**1,196**	**3,448**	**44,206**
SIZE OF STRUCTURED ENTITIES(1)	**150,608**	**254,702**	**2,880**	**9,058**	**417,248**

In millions of euros, at 31 December 2018	Securitisation	Funds	Asset Financing	Others	Total
INTERESTS ON THE GROUP BALANCE SHEET					
ASSETS					
Financial instruments at fair value through profit or loss	213	806	8	1,015	2,042
Derivatives used for hedging purposes	212	490	163	90	955
Financial instruments at fair value through equity	149	24			173
Financial assets at amortised cost	14,129	224	811	65	15,229
Other assets		142	1		143
Financial investments of insurance activities		21,978		399	22,377
TOTAL ASSETS	**14,703**	**23,664**	**983**	**1,569**	**40,919**
LIABILITIES					
Financial instruments at fair value through profit or loss	53	803		1,544	2,400
Derivatives used for hedging purposes					-
Financial liabilities at amortised cost	738	14,113	128	1,079	16,058
Other liabilities		186	85	1	272
TOTAL LIABILITIES	**791**	**15,102**	**213**	**2,624**	**18,730**
MAXIMUM EXPOSURE TO LOSS	**19,641**	**23,853**	**1,559**	**2,005**	**47,058**
SIZE OF STRUCTURED ENTITIES(1)	**99,642**	**253,140**	**3,544**	**13,419**	**369,745**

(1) *The size of sponsored structured entities equals the total assets of the structured entity for securitisation vehicles, the net asset value for funds (excluding management mandates) and the structured entity's total assets or the amount of the BNP Paribas Group's commitment for asset financing and other structures.*

The BNP Paribas Group's maximum exposure to losses on sponsored structured entities is the carrying amount of the assets, excluding, for financial assets at fair value through equity, changes in value taken directly to equity, as well as the nominal amount of the financing commitments and guarantee commitments given and the notional amount of credit default swaps (CDS) sold.

Information relative to interests in non-sponsored structured entities

The main interests held by the BNP Paribas Group when it acts solely as an investor in non-sponsored structured entities are detailed below:

- **Units in funds that are not managed by the Group, which are held by the Insurance business line:** as part of the asset allocation strategy corresponding to investments related to the premiums for unit-linked contracts or for the general fund, the Insurance business line subscribes to units of structured entities. These short- or medium-term investments are held for their financial performance and meet the risk diversification criteria inherent to the business. They amounted to EUR 34 billion as at 31 December 2019 (EUR 30 billion as at 31 December 2018). Changes in value and the majority of the risks associated with these investments are borne by policyholders in the case of assets representative of unit-linked contracts, and by the insurer in the case of assets representative of the general fund;
- **Other investments in funds not managed by the Group:** as part of its trading business, the BNP Paribas Group invests in structured entities without any involvement in either managing or structuring these entities (investments in mutual funds, securities funds or alternative funds), particularly as economic hedge for structured products sold to customers. The Group also invests in minority holdings in investment funds, in support of companies, as part of its venture capital business. These investments amounted to EUR 9 billion as at 31 December 2019 (8 billion as at 31 December 2018);
- **Investments in securitisation vehicles:** the breakdown of the Group's exposure and the nature of the securities held are presented in chapter 5 of the Universal registration document in the section *Securitisation as investor*.

Besides, in the framework of its asset financing activity, the BNP Paribas Group provides financing to structured entities that are established by and for its clients and whose purpose is to acquire assets (aircraft, ships, etc.) intended for lease to those same clients. These financings amount to EUR 7 billion as at 31 December 2019 (EUR 9 billion as at 31 December 2018).

8.g COMPENSATION AND BENEFITS AWARDED TO THE GROUP'S CORPORATE OFFICERS

The remuneration and benefits policy relating to the Group's corporate officers, as well as the detailed information on an individual basis, are presented in chapter 2 *Corporate Governance* of the Universal registration document.

➤ REMUNERATION AND BENEFITS AWARDED TO THE GROUP'S CORPORATE OFFICERS

	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Gross remuneration, including Directors' fees and benefits in kind		
payable for the year	€6,289,752	€6,060,688
paid during the year	€5,589,640	€9,428,032
Post-employment benefits		
Retirement bonuses: present value of the benefit obligation (payroll taxes excluded)	€247,090	€243,028
Defined contribution pension plan: contributions paid by BNP Paribas during the year	€5,228	€5,124
Welfare benefits: premiums paid by BNP Paribas during the year	€12,743	€12,571
Share-based payments		
Stock subscription options		
value of stock options granted during the year	Nil	Nil
number of options held at 31 December	-	28,640
Performance shares		
value of shares granted during the year	Nil	Nil
number of shares held at 31 December	Nil	Nil
Long-term compensation		
fair value at grant date(*)	€1,013,527	€463,594

(*) *Valuation according to the method described in note 7.e.*

As at 31 December 2019, no corporate officer is eligible to a contingent collective defined-benefit top-up pension plan.

Directors' fees paid to members of the Board of directors

The Directors' fees paid in 2019 to all members of the Board of directors amount to EUR 1,300,000 unchanged from 2018. The amount paid in 2019 to members other than corporate officers was EUR 1,179,556, compared with EUR 1,176,907 in 2018.

➤ REMUNERATION AND BENEFITS AWARDED TO DIRECTORS REPRESENTING THE EMPLOYEES

In euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Gross remuneration paid during the year	111,368	108,077
Directors' fees (paid to the trade unions)	174,219	152,298
Premiums paid by BNP Paribas during the year into schemes related to Garantie Vie Professionnelle Accidents benefits and healthcare expense coverage	1,704	1,658
Contributions paid by BNP Paribas during the year into the defined-contribution plan	1,233	1,204

Loans, advances and guarantees granted to the Group's corporate officers

At 31 December 2019, the total outstanding loans granted directly or indirectly to the Group's corporate officers and their spouses amounted to EUR 4,775,072 (EUR 7,094,958 at 31 December 2018). These loans representing normal transactions were carried out on an arm's length basis.

8.h OTHER RELATED PARTIES

Other related parties of the BNP Paribas Group comprise consolidated companies (including entities consolidated under the equity method) and entities managing post-employment benefit plans offered to Group employees (except for multi-employer and multi-industry schemes).

Transactions between the BNP Paribas Group and related parties are carried out on an arm's length basis.

Relations between consolidated companies

A list of companies consolidated by the BNP Paribas Group is provided in note 8.j *Scope of consolidation*. Transactions and outstanding balances between fully-consolidated entities are eliminated. The tables below show transactions with entities accounted for under the equity method.

➤ OUTSTANDING BALANCES OF RELATED-PARTY TRANSACTIONS

In millions of euros	31 December 2019		31 December 2018	
	Joint ventures	Associates	Joint ventures	Associates
ASSETS				
On demand accounts	3	139	2	171
Loans	4,408	103	3,784	85
Securities	732	-	769	-
Other assets	58	133	56	76
Financial investments of insurance activities	-	4	1	3
TOTAL	**5,201**	**379**	**4,612**	**335**
LIABILITIES				
On demand accounts	354	689	150	555
Other borrowings	87	1,781	53	2,084
Other liabilities	6	6	43	61
Technical reserves and other insurance liabilities	-	70	-	2
TOTAL	**447**	**2,546**	**246**	**2,702**
FINANCING COMMITMENTS AND GUARANTEE COMMITMENTS				
Financing commitments given	114	651	132	671
Guarantee commitments given	2,545	37	2,543	44
TOTAL	**2,659**	**688**	**2,675**	**715**

The Group also carries out trading transactions with related parties involving derivatives (swaps, options and forwards, etc.) and financial instruments purchased or underwritten and issued by them (equities, bonds, etc.).

➤ RELATED-PARTY PROFIT AND LOSS ITEMS

In millions of euros	Year to 31 Dec. 2019		Year to 31 Dec. 2018	
	Joint ventures	Associates	Joint ventures	Associates
Interest income	29	9	17	25
Interest expense	(6)	(9)	(2)	(10)
Commission income	151	279	188	271
Commission expense	(12)	(28)	(15)	(18)
Services provided	1	52	1	16
Services received	(2)	(7)	-	
Lease income	1	-	1	
Net income from insurance activities	(2)	(6)	(2)	(1)
TOTAL	**160**	**290**	**188**	**283**

Group Entities managing certain post-employment benefit plans offered to Group employees

In Belgium, BNP Paribas Fortis funds a number of pension schemes managed by AG Insurance in which the BNP Paribas Group has a 25% equity interest.

In other countries, post-employment benefit plans are generally managed by independent fund managers or independent insurance companies, and occasionally by Group companies (in particular BNP Paribas Asset Management, BNP Paribas Cardif and Bank of the West). In Switzerland, a dedicated foundation manages pension plans for BNP Paribas Suisse's employees.

At 31 December 2019, the value of plan assets managed by Group companies or by companies over which the Group exercises significant influence was EUR 4,156 million (EUR 3,853 million as at 31 December 2018). Amounts received by Group companies in the year to 31 December 2019 totalled EUR 4.6 million, and were mainly composed of management and custody fees (EUR 4.7 million in 2018).

8.i FAIR VALUE OF FINANCIAL INSTRUMENTS CARRIED AT AMORTISED COST

The information supplied in this note must be used and interpreted with the greatest caution for the following reasons:

- these fair values are an estimate of the value of the relevant instruments as at 31 December 2019. They are liable to fluctuate from day to day as a result of changes in various parameters, such as interest rates and credit quality of the counterparty. In particular, they may differ significantly from the amounts actually received or paid on maturity of the instrument. In most cases, the fair value is not intended to be realised immediately, and in practice might not be realised immediately. Consequently, this fair value does not reflect the actual value of the instrument to BNP Paribas as a going concern;
- most of these fair values are not meaningful, and hence are not taken into account in the management of the commercial banking activities which use these instruments;
- estimating a fair value for financial instruments carried at historical cost often requires the use of modelling techniques, hypotheses and assumptions that may vary from bank to bank. This means that comparisons between the fair values of financial instruments carried at historical cost as disclosed by different banks may not be meaningful;
- the fair values shown below do not include the fair values of finance lease transactions, non-financial instruments such as property, plant and equipment, goodwill and other intangible assets such as the value attributed to demand deposit portfolios or customer relationships. Consequently, these fair values should not be regarded as the actual contribution of the instruments concerned to the overall valuation of the BNP Paribas Group.

In millions of euros, at 31 December 2019	Estimated fair value				Carrying value
	Level 1	Level 2	Level 3	Total	
FINANCIAL ASSETS					
Loans and advances to credit institutions and customers[(1)]		80,252	726,014	806,266	792,944
Debt securities at amortised cost *(note 5.e)*	75,884	31,168	3,103	110,155	108,454
FINANCIAL LIABILITIES					
Deposits from credit institutions and customers		919,995		919,995	919,234
Debt securities *(note 5.h)*	36,465	122,779		159,244	157,578
Subordinated debt *(note 5.h)*	7,858	12,926		20,784	20,003

(1) Finance leases excluded.

In millions of euros, at 31 December 2018	Estimated fair value				Carrying value
	Level 1	Level 2	Level 3	Total	
FINANCIAL ASSETS					
Loans and advances to credit institutions and customers[(1)]		82,358	681,583	763,941	753,293
Debt securities at amortised cost *(note 5.e)*	54,348	17,764	2,840	74,952	75,073
FINANCIAL LIABILITIES					
Deposits from credit institutions and customers		876,320		876,320	875,463
Debt securities *(note 5.h)*	49,233	102,511		151,744	151,451
Subordinated debt *(note 5.h)*	10,883	6,494		17,377	17,627

(1) Finance leases excluded.

The valuation techniques and assumptions used by BNP Paribas ensure that the fair value of financial assets and liabilities carried at amortised cost is measured on a consistent basis throughout the Group. Fair value is based on prices quoted in an active market when these are available. In other cases, fair value is determined using valuation techniques such as discounting of estimated future cash flows for loans, liabilities and debt securities at amortised cost, or specific valuation models for other financial instruments as described in note 1, "Summary of significant accounting policies applied by the BNP Paribas Group". The description of the fair value hierarchy levels is also presented in the accounting principles (note 1.e.10). In the case of loans, liabilities and debt securities at amortised cost that have an initial maturity of less than one year (including demand deposits) or of most regulated savings products, fair value equates to carrying amount. These instruments have been classified in Level 2, except for loans to customers, which are classified in Level 3.

8.j SCOPE OF CONSOLIDATION

		31 December 2019					31 December 2018				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
BNP Paribas SA	France										
BNPP SA (Argentina branch)	Argentina	Full		100%	100%		Full		100%	100%	
BNPP SA (Australia branch)	Australia	Full		100%	100%		Full		100%	100%	
BNPP SA (Austria branch)	Austria	Full		100%	100%		Full		100%	100%	
BNPP SA (Bahrain branch)	Bahrain	Full		100%	100%		Full		100%	100%	
BNPP SA (Belgium branch)	Belgium	Full		100%	100%		Full		100%	100%	
BNPP SA (Bulgaria branch)	Bulgaria	Full		100%	100%		Full		100%	100%	
BNPP SA (Canada branch)	Canada	Full		100%	100%		Full		100%	100%	
BNPP SA (Cayman islands branch)	Cayman Islands	Full		100%	100%		Full		100%	100%	
BNPP SA (Czech republic branch)	Czech Rep.	Full		100%	100%		Full		100%	100%	
BNPP SA (Denmark branch)	Denmark	Full		100%	100%		Full		100%	100%	
BNPP SA (Finland branch)	Finland	Full		100%	100%		Full		100%	100%	
BNPP SA (Germany branch)	Germany	Full		100%	100%		Full		100%	100%	
BNPP SA (Hong Kong branch)	Hong Kong	Full		100%	100%		Full		100%	100%	
BNPP SA (Hungary branch)	Hungary	Full		100%	100%		Full		100%	100%	
BNPP SA (India branch)	India	Full		100%	100%		Full		100%	100%	
BNPP SA (Ireland branch)	Ireland	Full		100%	100%		Full		100%	100%	
BNPP SA (Italy branch)	Italy	Full		100%	100%		Full		100%	100%	
BNPP SA (Japan branch)	Japan	Full		100%	100%		Full		100%	100%	
BNPP SA (Jersey branch)	Jersey	Full		100%	100%		Full		100%	100%	
BNPP SA (Kuwait branch)	Kuwait	Full		100%	100%		Full		100%	100%	
BNPP SA (Luxemburg branch)	Luxemburg	Full		100%	100%		Full		100%	100%	
BNPP SA (Malaysia branch)	Malaysia	Full		100%	100%		Full		100%	100%	
BNPP SA (Monaco branch)	Monaco	Full		100%	100%		Full		100%	100%	
BNPP SA (Netherlands branch)	Netherlands	Full		100%	100%		Full		100%	100%	
BNPP SA (Norway branch)	Norway	Full		100%	100%		Full		100%	100%	
BNPP SA (Panama branch)	Panama	Full		100%	100%		Full		100%	100%	
BNPP SA (Philippines branch)	Philippines	Full		100%	100%		Full		100%	100%	
BNPP SA (Poland branch)	Poland	Full		100%	100%		Full		100%	100%	
BNPP SA (Portugal branch)	Portugal	Full		100%	100%		Full		100%	100%	
BNPP SA (Qatar branch)	Qatar	Full		100%	100%		Full		100%	100%	
BNPP SA (Republic of Korea branch)	Rep. of Korea	Full		100%	100%		Full		100%	100%	
BNPP SA (Romania branch)	Romania	Full		100%	100%		Full		100%	100%	
BNPP SA (Saudi arabia branch)	Saudi Arabia	Full		100%	100%		Full		100%	100%	
BNPP SA (Singapore branch)	Singapore	Full		100%	100%		Full		100%	100%	
BNPP SA (South Africa branch)	South Africa	Full		100%	100%		Full		100%	100%	
BNPP SA (Spain branch)	Spain	Full		100%	100%		Full		100%	100%	
BNPP SA (Sweden branch)	Sweden	Full		100%	100%		Full		100%	100%	
BNPP SA (Taiwan branch)	Taiwan	Full		100%	100%		Full		100%	100%	
BNPP SA (Thailand branch)	Thailand	Full		100%	100%		Full		100%	100%	
BNPP SA (United arab emirates branch)	United Arab Emirates	Full		100%	100%		Full		100%	100%	
BNPP SA (United kingdom branch)	UK	Full		100%	100%		Full		100%	100%	
BNPP SA (United states branch)	USA	Full		100%	100%		Full		100%	100%	
BNPP SA (Viet nam branch)	Viet Nam	Full		100%	100%		Full		100%	100%	
Retail Banking & Services											
Domestic Markets											
Retail Banking - France											
Banque de Wallis et Futuna	France	Full	(1)	51%	51%		Full	(1)	51%	51%	
BNPP Antilles Guyane	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Développement	France	Full		100%	100%		Full		100%	100%	
BNPP Développement Oblig	France	Full		100%	100%		Full		100%	100%	E2
BNPP Factor	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Factor (Spain branch)	Spain	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Factor Sociedade Financeira de Credito SA	Portugal	Full		100%	100%		Full		100%	100%	
BNPP Nouvelle-Calédonie	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Réunion	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Compagnie pour le Financement des Loisirs	France	Equity		46%	46%		Equity		46%	46%	V4
Copartis	France	Equity	(3)	50%	50%		Equity	(3)	50%	50%	
Euro Securities Partners	France	Equity	(3)	50%	50%		Equity	(3)	50%	50%	E1
GIE Ocean	France	Full		100%	100%	E1					
Partecis	France	Equity	(3)	50%	50%		Equity	(3)	50%	50%	E1
Paylib Services	France	Equity		14.3%	14.3%	E1					
Portzamparc (Ex- B*Capital)	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Portzamparc Société de Bourse	France					S4	Full	(1)	94.9%	94.9%	V1

		31 December 2019					31 December 2018				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
Protection 24	France	Full		100%	100%		Full		100%	100%	E1
Société Lairoise de Participations	France	Full		100%	100%		Full		100%	100%	E1
Retail Banking - Belgium											
Bancontact Paytoniq Company	Belgium	Equity		22.5%	22.5%		Equity		22.5%	22.5%	E1
Banking Funding Company SA	Belgium	Equity		33.5%	33.5%		Equity		33.5%	33.5%	
BASS Master Issuer NV(s)	Belgium	Full		-	-		Full		-	-	
Belgian Mobile ID	Belgium	Equity		15%	15%		Equity		15%	15%	E3
BNPP Commercial Finance Ltd	UK	Full		100%	99.9%		Full		100%	99.9%	
BNPP Factor AB	Sweden	Full		100%	99.9%		Full		100%	99.9%	E1
BNPP Factor AS	Denmark	Full		100%	99.9%		Full		100%	99.9%	
BNPP Factor Deutschland BV	Netherlands										S4
BNPP Factor GmbH	Germany	Full		100%	99.9%		Full		100%	99.9%	
BNPP Factor NV	Netherlands	Full		100%	99.9%		Full		100%	99.9%	
BNPP Factoring Support	Netherlands	Full		100%	99.9%		Full		100%	99.9%	
BNPP Fortis	Belgium	Full		99.9%	99.9%		Full		99.9%	99.9%	
BNPP Fortis (Czech Republic branch)	Czech Rep.										S1
BNPP Fortis (Denmark branch)	Denmark										S1
BNPP Fortis (Romania branch)	Romania					S1	Full		100%	99.9%	
BNPP Fortis (Spain branch)	Spain	Full		100%	99.9%		Full		100%	99.9%	
BNPP Fortis (United states branch)	USA	Full		100%	99.9%		Full		100%	99.9%	
BNPP Fortis Factor NV	Belgium	Full		100%	99.9%		Full		100%	99.9%	
BNPP Fortis Film Finance	Belgium	Full		99%	98.9%		Full		99%	98.9%	E1
BNPP Fortis Funding SA	Luxemburg	Full		100%	99.9%		Full		100%	99.9%	
BNPP FPE Belgium	Belgium	Full		100%	99.9%		Full		100%	99.9%	
BNPP FPE Expansion	Belgium	Full		100%	99.9%		Full		100%	99.9%	
BNPP FPE Management	Belgium	Full		100%	99.9%		Full		100%	99.9%	
Bpost Banque	Belgium	Equity	(3)	50%	50%		Equity	(3)	50%	50%	
Credissimo	Belgium	Full		100%	99.9%		Full		100%	99.9%	
Credissimo Hainaut SA	Belgium	Full		99.7%	99.7%		Full		99.7%	99.7%	
Crédit pour Habitations Sociales	Belgium	Full		81.7%	81.6%		Full		81.7%	81.6%	
Demetris NV	Belgium										S3
Epimede(s)	Belgium	Equity		-	-		Equity		-	-	E1
Esmee Master Issuer(s)	Belgium	Full		-	-		Full		-	-	
Favor Finance	Belgium										S3
Immo Beaulieu	Belgium	Equity		25%	25%		Equity		25%	25%	E1
Immobilière Sauveniere SA	Belgium	Full		100%	99.9%		Full		100%	99.9%	D1
Isabel SA NV	Belgium	Equity		25.3%	25.3%		Equity		25.3%	25.3%	E1
Microstart	Belgium	Full		96.4%	76.7%	V1	Full		85.5%	66.2%	E1
Private Equity Investments (e)	Belgium/ Luxemburg	FV		-	-		FV		-	-	
Sagip	Belgium	Full		100%	100%		Full		100%	100%	
Sowo Invest SA NV	Belgium	Full		87.5%	87.5%		Full		87.5%	87.5%	E1
Retail Banking - Luxembourg											
BGL BNPP	Luxemburg	Full		66%	65.9%		Full		66%	65.9%	
BGL BNPP (Germany branch)	Germany	Full		100%	65.9%		Full		100%	65.9%	
BNPP Lease Group Luxembourg SA	Luxemburg	Full		100%	65.9%		Full		100%	65.9%	
BNPP SB Re	Luxemburg	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cofhylux SA	Luxemburg	Full		100%	65.9%		Full		100%	65.9%	
Compagnie Financière Ottomane SA	Luxemburg	Full		97.3%	97.3%	V4	Full		97.3%	97.2%	
Elimmo SARL(s)	Luxemburg					S3	Full		-	-	E1
Le Sphinx Assurances Luxembourg SA	Luxemburg	Full	(2)	100%	100%		Full	(2)	100%	100%	
Lion International Investments SA	Luxemburg	Full		100%	100%		Full		100%	100%	
Plagefin SA	Luxemburg					S4	Full		100%	65.9%	
Visalux	Luxemburg	Equity		25.3%	16.7%	V4	Equity		24.8%	15.7%	E1
Retail Banking - Italy											
Artigiancassa SPA	Italy	Full		73.9%	73.9%		Full		73.9%	73.9%	
Axepta SPA	Italy	Full		100%	100%		Full		100%	100%	
Banca Nazionale Del Lavoro SPA	Italy	Full		100%	100%		Full		100%	100%	
BNL Finance SPA	Italy	Full		100%	100%		Full		100%	100%	
Business Partner Italia SCPA	Italy					S4	Full		100%	100%	V4
EMF IT 2008 1 SRL(s)	Italy	Full		-	-		Full		-	-	
Eutimm SRL	Italy	Full		100%	100%	E1					
International Factors Italia SPA	Italy	Full		99.7%	99.7%		Full		99.7%	99.7%	
Permicro SPA	Italy	Equity		21.6%	21.6%	V4	Equity		20.9%	20.9%	E1
Serfactoring SPA	Italy	Equity		27%	26.9%		Equity		27%	26.9%	E1
Servizio Italia SPA	Italy	Full		100%	100%		Full		100%	100%	D1

Name	Country	31 December 2019 Method		Voting (%)	Interest (%)	Ref.	31 December 2018 Method		Voting (%)	Interest (%)	Ref.
Sviluppo HQ Tiburtina SRL	Italy	Full		100%	100%		Full		100%	100%	
Tierre Securitisation SRL(s)	Italy	Full		-	-		Full		-	-	
Vela ABS SRL(s)	Italy	Full		-	-		Full		-	-	
Vela Consumer 2 SRL(s)	Italy	Full		-	-		Full		-	-	
Vela Consumer SRL(s)	Italy	Full		-	-		Full		-	-	
Vela Home SRL(s)	Italy	Full		-	-		Full		-	-	
Vela Mortgages SRL(s)	Italy	Full		-	-		Full		-	-	
Vela OBG SRL(s)	Italy	Full		-	-		Full		-	-	
Vela RMBS SRL(s)	Italy	Full		-	-		Full		-	-	
Arval											
Annuo Jiutong	China										V2/ S2
Artel	France	Full	(2)	100%	99.9%		Full		100%	99.9%	D1
Arval AB	Sweden	Full	(2)	100%	99.9%		Full		100%	99.9%	D1
Arval AS	Denmark	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval AS Norway	Norway	Full	(2)	100%	99.9%	E1					
Arval Austria GmbH	Austria	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Belgium NV SA	Belgium	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Benelux BV	Netherlands	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Brasil Ltda	Brazil	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval BV	Netherlands	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval CZ SRO	Czech Rep.	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Deutschland GmbH	Germany	Full		100%	99.9%		Full		100%	99.9%	
Arval Fleet Services	France	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Hellas Car Rental SA	Greece	Full	(2)	100%	99.9%		Full		100%	99.9%	D1
Arval India Private Ltd	India	Full	(2)	100%	99.9%		Full		100%	99.9%	D1
Arval LLC	Russia	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Luxembourg SA	Luxemburg	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Magyarorszag KFT	Hungary	Full	(2)	100%	99.9%		Full		100%	99.9%	D1
Arval Maroc SA	Morocco	Full	(2)	100%	89%		Full		100%	89%	D1
Arval OY	Finland	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Relsa SPA	Chile	Equity		50%	50%		Equity	(3)	50%	50%	E1
Arval Schweiz AG	Switzerland	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Service Lease	France	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Service Lease Aluger Operational Automoveis SA	Portugal	Full	(2)	100%	99.9%		Full		100%	99.9%	D1
Arval Service Lease Italia SPA	Italy	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Service Lease Polska SP ZOO	Poland	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Service Lease Romania SRL	Romania	Full	(2)	100%	99.9%		Full		100%	99.9%	D1
Arval Service Lease SA	Spain	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Slovakia SRO	Slovakia	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval Trading	France	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval UK Group Ltd	UK	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval UK Leasing Services Ltd	UK	Full	(2)	100%	99.9%		Full		100%	99.9%	
Arval UK Ltd	UK	Full		100%	99.9%		Full		100%	99.9%	
BNPP Fleet Holdings Ltd	UK	Full	(2)	100%	99.9%		Full		100%	99.9%	
Cetelem Renting	France					S4	Full		100%	99.9%	E1
Cofiparc	France	Full	(2)	100%	99.9%		Full		100%	99.9%	
Greenval Insurance DAC	Ireland	Full	(2)	100%	100%		Full	(2)	100%	100%	
Locadif	Belgium	Full	(2)	100%	99.9%		Full		100%	99.9%	
Louveo	France	Full	(2)	100%	99.9%		Full		100%	99.9%	E1
Public Location Longue Durée	France	Full	(2)	100%	99.9%		Full		100%	99.9%	
TEB Arval Arac Filo Kiralama AS	Turkey	Full	(2)	100%	75%		Full		100%	75%	
Leasing Solutions											
Albury Asset Rentals Ltd	UK										S1
All In One Vermietung GmbH	Austria	Full		100%	83%		Full		100%	83%	E1
Aprolis Finance	France	Full		51%	42.3%		Full		51%	42.3%	
Artegy	France	Full		100%	83%		Full		100%	83%	
BNL Leasing SPA	Italy	Full		100%	95.5%	E1					
BNPP 3 Step IT (Ex- Arius)	France	Full		51%	42.3%	V2	Full		100%	83%	
BNPP 3 Step IT (Belgium branch)	Belgium	Full		100%	42.3%	E2					
BNPP 3 Step IT (Germany branch)	Germany	Full		100%	42.3%	E2					
BNPP 3 Step IT (Italy branch)	Italy	Full		100%	42.3%	E2					
BNPP 3 Step IT (Netherlands branch)	Netherlands	Full		100%	42.3%	E2					
BNPP 3 Step IT (United kingdom branch)	UK	Full		100%	42.3%	E2					
BNPP B Institutional II Treasury 17(s)	Belgium										S3
BNPP Finansal Kiralama AS	Turkey	Full		100%	82.5%		Full		100%	82.5%	
BNPP Lease Group	France	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Germany branch)	Germany	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Italy branch)	Italy	Full	(1)	100%	83%		Full	(1)	100%	83%	

Name	Country	31 December 2019 Method		Voting (%)	Interest (%)	Ref.	31 December 2018 Method		Voting (%)	Interest (%)	Ref.
BNPP Lease Group (Portugal branch)	Portugal	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Spain branch)	Spain	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group Belgium	Belgium	Full		100%	83%		Full		100%	83%	
BNPP Lease Group GmbH & Co KG	Austria	Full		100%	83%		Full		100%	83%	E1
BNPP Lease Group Leasing Solutions SPA	Italy	Full		100%	95.5%		Full		100%	95.5%	
BNPP Lease Group PLC	UK	Full		100%	83%		Full		100%	83%	
BNPP Lease Group Rentals Ltd	UK	Full		100%	83%		Full		100%	83%	
BNPP Lease Group SP ZOO	Poland	Full		100%	83%		Full		100%	83%	
BNPP Leasing Services	Poland	Full		100%	88.7%		Full		100%	88.7%	V4
BNPP Leasing Solution AS	Norway	Full		100%	83%		Full		100%	83%	E3
BNPP Leasing Solutions	Luxemburg	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions IFN SA	Romania	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions Ltd	UK	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions NV	Netherlands	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions Suisse SA	Switzerland	Full		100%	83%		Full		100%	83%	D1
BNPP Rental Solutions Ltd	UK	Full		100%	83%		Full		100%	83%	
BNPP Rental Solutions SPA	Italy	Full		100%	83%		Full		100%	83%	D1
Claas Financial Services	France	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
Claas Financial Services (Germany branch)	Germany	Full	(1)	100%	42.3%		Full	(1)	100%	42.3%	
Claas Financial Services (Italy branch)	Italy	Full	(1)	100%	42.3%		Full	(1)	100%	42.3%	
Claas Financial Services (Poland branch)	Poland	Full	(1)	100%	42.3%		Full	(1)	100%	42.3%	
Claas Financial Services (Spain branch)	Spain	Full	(1)	100%	42.3%		Full	(1)	100%	42.3%	
Claas Financial Services Ltd	UK	Full		51%	42.3%		Full		51%	42.3%	
CMV Mediforce	France	Full	(1)	100%	83%		Full	(1)	100%	83%	V3
CNH Industrial Capital Europe	France	Full	(1)	50.1%	41.6%		Full	(1)	50.1%	41.6%	
CNH Industrial Capital Europe (Belgium branch)	Belgium	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
CNH Industrial Capital Europe (Germany branch)	Germany	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
CNH Industrial Capital Europe (Italy branch)	Italy	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
CNH Industrial Capital Europe (Poland branch)	Poland	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
CNH Industrial Capital Europe (Spain branch)	Spain	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
CNH Industrial Capital Europe BV	Netherlands	Full		100%	41.6%		Full		100%	41.6%	
CNH Industrial Capital Europe GmbH	Austria	Full		100%	41.6%		Full		100%	41.6%	
CNH Industrial Capital Europe Ltd	UK	Full		100%	41.6%		Full		100%	41.6%	
Commercial Vehicle Finance Ltd	UK	Full		100%	83%		Full		100%	83%	
ES-Finance	Belgium	Full		100%	99.9%		Full		100%	99.9%	
FL Zeebrugge(s)	Belgium	Full		-	-		Full		-	-	D1
Folea Grundstucksverwaltungs und Vermietungs Gmbh & Co(s)	Germany	Full		-	-		Full		-	-	D1
Fortis Lease	France	Full	(1)	100%	83%		Full	(1)	100%	83%	
Fortis Lease Belgium	Belgium	Full		100%	83%		Full		100%	83%	
Fortis Lease Deutschland GmbH	Germany	Full		100%	83%		Full		100%	83%	
Fortis Lease Iberia SA	Spain	Full		100%	86.6%		Full		100%	86.6%	
Fortis Lease Portugal	Portugal	Full		100%	83%		Full		100%	83%	
Fortis Lease UK Ltd	UK	Full		100%	83%		Full		100%	83%	D1
Fortis Vastgoedlease BV	Netherlands	Full		100%	83%		Full		100%	83%	D1
Heffiq Heftruck Verhuur BV	Netherlands	Full		50%	41.5%		Full		50.1%	41.5%	E1
Humberclyde Commercial Investments Ltd	UK										S1
JCB Finance	France	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
JCB Finance (Germany branch)	Germany	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
JCB Finance (Italy branch)	Italy	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
JCB Finance Holdings Ltd	UK	Full		50.1%	41.6%		Full		50.1%	41.6%	
Manitou Finance Ltd	UK	Full		51%	42.3%		Full		51%	42.3%	
MFF	France	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
Natio Energie 2	France	Full		100%	100%		Full		100%	100%	E1
Natiocredibail	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
RD Leasing IFN SA	Romania	Full		100%	83%		Full		100%	83%	E3
Same Deutz Fahr Finance	France	Full	(1)	100%	83%		Full	(1)	100%	83%	
Same Deutz Fahr Finance Ltd	UK										S1
SNC Natiocredimurs	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
UCB Bail 2	France	Full		100%	100%		Full		100%	100%	

		31 December 2019					31 December 2018				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
New Digital Businessesv											
Financière des Paiements Electroniques	France	Full		95%	95%		Full		95%	95%	
Financière des Paiements Electroniques (succ. Espagne)	Spain	Full		100%	95%	E2					
Lyf SA	France	Equity	(3)	43.8%	43.8%	V2	Equity	(3)	46%	46%	V1
Lyf SAS	France	Equity	(3)	45.4%	45.4%	V2	Equity	(3)	45.8%	45.8%	V1
Personal Investors											
Geojit Technologies Private Ltd	India	Equity		35%	35%		Equity		35%	35%	
Human Value Developers Private Ltd	India	Full		100%	100%		Full		100%	100%	
Sharekhan BNPP Financial Services Private Ltd	India	Full		100%	100%		Full		100%	100%	
Sharekhan Commodities Private Ltd	India	Full		100%	100%		Full		100%	100%	E1
Sharekhan Ltd	India	Full		100%	100%		Full		100%	100%	
International Financial Services											
BNP Paribas Personal Finance											
Alpha Crédit SA	Belgium	Full		100%	99.9%		Full		100%	99.9%	
AutoFlorence 1 SRL(s)	Italy	Full		-	-	E1					
Autonoria 2019(s)	France	Full		-	-	E2					
Autonoria Spain 2019(s)	Spain	Full		-	-	E2					
Autop Ocean Indien	France	Full		100%	97.8%		Full		100%	97.8%	E1
Axa Banque Financement	France	Equity		35%	35%		Equity		35%	35%	
B Carat(s)	Belgium										S1
Banco BNPP Personal Finance SA	Portugal	Full		100%	100%		Full		100%	100%	
Banco Cetelem Argentina SA	Argentina					S3	Full		100%	100%	
Banco Cetelem SA	Brazil	Full		100%	100%		Full		100%	100%	
Banco Cetelem SAU	Spain	Full		100%	100%		Full		100%	100%	
Banco de Servicios Financieros SA	Argentina					S2	Equity		40%	40%	
Banque Solfea	France	Equity	(3)	45%	45%		Equity	(3)	45%	45%	
BGN Mercantil E Servicos Ltda	Brazil	Full		100%	100%		Full		100%	100%	
BNPP Personal Finance	France	Full		100%	100%		Full		100%	100%	
BNPP Personal Finance (Austria branch)	Austria	Full		100%	100%		Full		100%	100%	
BNPP Personal Finance (Bulgaria branch)	Bulgaria	Full		100%	100%		Full		100%	100%	E2
BNPP Personal Finance (Czech republic branch)	Czech Rep.	Full		100%	100%		Full		100%	100%	
BNPP Personal Finance (Romania branch)	Romania	Full		100%	100%		Full		100%	100%	E2
BNPP Personal Finance (Slovakia branch)	Slovakia	Full		100%	100%		Full		100%	100%	
BNPP Personal Finance BV	Netherlands	Full		100%	100%		Full		100%	100%	
BNPP Personal Finance EAD	Bulgaria										S4
BNPP Personal Finance South Africa Ltd	South Africa	Full		100%	100%		Full		100%	100%	
Cafineo	France	Full	(1)	51%	50.8%		Full	(1)	51%	50.8%	
Carrefour Banque	France	Equity		40%	40%		Equity		40%	40%	
Cartolarizzazione Auto Receivable's SRL(s)	Italy										S3
Cetelem Algérie	Algeria	Full		100%	100%		Full		100%	100%	E1
Cetelem America Ltda	Brazil	Full		100%	100%		Full		100%	100%	
Cetelem Bank LLC	Russia	Equity		20.8%	20.8%		Equity		20.8%	20.8%	
Cetelem Gestion AIE	Spain	Full		99%	95.5%	V2	Full		100%	96.5%	E1
Cetelem IFN	Romania										S4
Cetelem SA de CV	Mexico	Full		100%	100%		Full		100%	100%	
Cetelem Servicios Informaticos AIE	Spain	Full		99%	80.5%	V2	Full		100%	81.5%	E1
Cetelem Servicios SA de CV	Mexico	Full		100%	100%	E1					
Cetelem Servicos Ltda	Brazil	Full		100%	100%		Full		100%	100%	D1
Cofica Bail	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Cofinoga Funding Two LP(s)	UK	Full		-	-		Full		-	-	
Cofiplan	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Creation Consumer Finance Ltd	UK	Full		100%	100%		Full		100%	100%	
Creation Financial Services Ltd	UK	Full		100%	100%		Full		100%	100%	
Crédit Moderne Antilles Guyane	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Crédit Moderne Océan Indien	France	Full	(1)	97.8%	97.8%		Full	(1)	97.8%	97.8%	
Domofinance	France	Full	(1)	55%	55%		Full	(1)	55%	55%	
E carat 10(s)	France	Full		-	-	E2					
Ecarat SA(s)	Luxemburg	Full		-	-		Full		-	-	
Ecarat UK (a)(s)	UK	Full		-	-		Full		-	-	
Effico	France	Equity		24.5%	24.5%		Equity		24.5%	24.5%	
Ekspres Bank AS	Denmark	Full		100%	100%		Full		100%	100%	
Ekspres Bank AS (Norway branch)	Norway	Full		100%	100%		Full		100%	100%	
Ekspres Bank AS (Sweden branch)	Sweden	Full		100%	100%		Full		100%	100%	E2
Eos Aremas Belgium SA NV	Belgium	Equity		50%	49.9%		Equity		50%	49.9%	
FCT F Carat(s)	France										S1
Findomestic Banca SPA	Italy	Full		100%	100%		Full		100%	100%	
Florence 1 SRL(s)	Italy										S1
Florence SPV SRL(s)	Italy	Full		-	-		Full		-	-	
GCC Consumo Establecimiento Financiero de Credito SA	Spain	Full		51%	51%		Full		51%	51%	
Genius Auto Finance Co Ltd	China	Equity	(3)	20%	20%		Equity	(3)	20%	20%	
Gesellschaft für Capital & Vermögensverwaltung GmbH	Germany										S3
I Carat SRL(s)	Italy										S1
Inkasso Kodat GmbH & Co KG	Germany										S3
International Development Resources AS Services SA	Spain										S3
Laser ABS 2017 Holding Ltd	UK	Full		100%	100%		Full		100%	100%	
Laser ABS 2017 PLC(s)	UK	Full		-	-		Full		-	-	
Leval 20	France	Full		100%	100%		Full		100%	100%	
Loisirs Finance	France	Full	(1)	51%	51%		Full	(1)	51%	51%	
Magyar Cetelem Bank ZRT	Hungary	Full		100%	100%		Full		100%	100%	
Neuilly Contentieux	France	Full		96%	95.7%		Full		96%	95.7%	E1
Noria 2018-1(s)	France	Full		-	-		Full		-	-	E2
Norrsken Finance	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Olympia SAS	France	Full		50%	50%		Full		50%	50%	
Oney Magyarorszag ZRT	Hungary	Equity		40%	40%		Equity		40%	40%	
Opel Bank	France	Full		50%	50%		Full		50%	50%	
Opel Bank (Germany branch)	Germany	Full		100%	50%	E2					
Opel Bank (Greece branch)	Greece	Full		100%	50%	E2					
Opel Bank (Italy branch)	Italy	Full		100%	50%	E2					
Opel Bank (Spain branch)	Spain	Full		100%	50%	E2					
Opel Bank GmbH	Germany					S4	Full		100%	50%	
Opel Bank GmbH (Greece branch)	Greece					S4	Full		100%	50%	
Opel Bank GmbH (Ireland branch)	Ireland					S1	Full		100%	50%	
Opel Bank GmbH (Spain branch)	Spain					S4	Full		100%	50%	E2
Opel Finance AB	Sweden					S3	Full		100%	50%	D1
Opel Finance BV (Ex-Opel Finance BVBA)	Belgium	Full		100%	50%		Full		100%	50%	D1
Opel Finance Germany Holdings GmbH	Germany										S4
Opel Finance International BV	Netherlands	Full		100%	50%		Full		100%	50%	
Opel Finance NV	Netherlands	Full		100%	50%		Full		100%	50%	D1
Opel Finance NV (Belgium branch)	Belgium										S1
Opel Finance SA	Switzerland	Full		100%	50%		Full		100%	50%	D1
Opel Finance SPA	Italy					S4	Full		100%	50%	
Opel Leasing GmbH	Germany	Full		100%	50%		Full		100%	50%	
Opel Leasing GmbH (Austria branch)	Austria	Full		100%	50%		Full		100%	50%	
OPVF Europe Holdco Ltd	UK										S4
OPVF Holdings UK Ltd	UK										S1
Phedina Hypotheken 2010 BV(s)	Netherlands	Full		-	-		Full		-	-	
Phedina Hypotheken 2013 I BV(s)	Netherlands					S1	Full		-	-	
Projeo	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
RCS Cards Pty Ltd	South Africa	Full		100%	100%		Full		100%	100%	
Securely Transferred Auto Receivables II SA(s)	luxemburg										S3
Securitisation fund Autonoria(s)	France					S1	Full		-	-	
Securitisation funds Domos (c)(s)	France	Full		-	-		Full		-	-	
Securitisation funds UCI and RMBS Prado (b)(s)	Spain	Equity	(3)	-	-		Equity	(3)	-	-	
Servicios Financieros Carrefour EFC SA	Spain	Equity		37.3%	40%		Equity		37.3%	40%	
Sevenday Finans AB	Sweden										S4
Sundaram BNPP Home Finance Ltd	India					S2	Equity	(3)	49.9%	49.9%	
Suning Consumer Finance Co Ltd	China	Equity		15%	15%		Equity		15%	15%	
Sygma Funding Two Ltd	UK	Full		100%	100%		Full		100%	100%	
Symag	France	Full		100%	100%		Full		100%	100%	
TEB Finansman AS	Turkey	Full		100%	92.8%		Full		100%	92.8%	
UCB Ingatlanhitel ZRT	Hungary					S4	Full		100%	100%	
Union de Creditos Inmobiliarios SA	Spain	Equity	(3)	50%	50%		Equity	(3)	50%	50%	

Name	Country	31 December 2019 Method	Voting (%)	Interest (%)	Ref.	31 December 2018 Method	Voting (%)	Interest (%)	Ref.
United Partnership	France	Equity (3)	50%	50%		Equity (3)	50%	50%	E1
Vault Funding Ltd(s)	UK								S3
Vauxhall Finance PLC	UK	Full	100%	50%		Full	100%	50%	
Von Essen Bank GmbH	Germany				S4	Full	100%	99.9%	
Warf 2012 Ltd(s)	UK								S3
International Retail Banking - BancWest									
1897 Services Corp	USA				S4	Full	100%	100%	
BancWest Corp	USA				S4	Full	100%	100%	
BancWest Holding Inc	USA	Full	100%	100%		Full	100%	100%	
BancWest Holding Inc Grantor Trust ERC Subaccount(s)	USA	Full	-	-	E1				
BancWest Investment Services Inc	USA	Full	100%	100%		Full	100%	100%	
Bank of the West	USA	Full	100%	100%		Full	100%	100%	
Bank of the West Auto Trust 2014-1(s)	USA								S1
Bank of the West Auto Trust 2015-1(s)	USA								S2
Bank of the West Auto Trust 2017-1(s)	USA								S2
Bank of the West Auto Trust 2018-1(s)	USA	Full	-	-		Full	-	-	
Bank of the West Auto Trust 2019-1 (Ex- Bank of the West Auto Trust 2018-2)(s)	USA	Full	-	-		Full	-	-	E2
Bank of the West Auto Trust 2019-2(s)	USA	Full	-	-	E2				
Bishop Street Capital Management Corp	USA								V3/ S2
BNPP Leasing Solutions Canada Inc	Canada	Full	100%	100%		Full	100%	100%	E1
BOW Auto Receivables LLC(s)	USA	Full	-	-		Full	-	-	
BWC Opportunity Fund 2 Inc(s)	USA	Full	-	-	E2				
BWC Opportunity Fund Inc(s)	USA	Full	-	-		Full	-	-	E2
Center Club Inc	USA								V3/ S2
CFB Community Development Corp	USA	Full	100%	100%		Full	100%	100%	
Claas Financial Services LLC	USA	Full	51%	51%		Full	51%	51%	
Commercial Federal Affordable Housing Inc	USA	Full	100%	100%		Full	100%	100%	
Commercial Federal Community Development Corp	USA	Full	100%	100%		Full	100%	100%	
Commercial Federal Insurance Corp	USA	Full	100%	100%		Full	100%	100%	
Commercial Federal Investment Service Inc	USA	Full	100%	100%		Full	100%	100%	
FHL SPC One Inc	USA								V3/ S2
First Bancorp(s)	USA				S4	Full	-	-	
First Hawaiian Bank	USA								V3/ S2
First Hawaiian Inc	USA				S2	Equity	18.4%	18.4%	V2
First Hawaiian Leasing Inc	USA								V3/ S2
First National Bancorporation(s)	USA				S1	Full	-	-	
First Santa Clara Corp(s)	USA	Full	-	-		Full	-	-	
Glendale Corporate Center Acquisition LLC(s)	USA								S2
LACMTA Rail Statutory Trust FH1(s)	USA								V3/ S2
Liberty Leasing Co	USA	Full	100%	100%		Full	100%	100%	
Mountain Falls Acquisition Corp	USA				S1	Full	100%	100%	
Real Estate Delivery 2 Inc	USA								V3/ S2
ST 2001 FH 1 Statutory Trust(s)	USA								V3/ S2
The Bankers Club Inc	USA								V3/ S2
Ursus Real Estate Inc	USA	Full	100%	100%		Full	100%	100%	
VTA 1998 FH(s)	USA								S1
International Retail Banking - Europe Mediterranean									
Bank of Nanjing	China	Equity	15%	15%		Equity	15%	15%	V2
Banque Internationale pour le Commerce et l'Industrie de la Côte d'Ivoire	Ivory Coast	Full	59.8%	59.8%		Full	59.8%	59.8%	
Banque Internationale pour le Commerce et l'Industrie de la Guinée	Guinea	Full	55.6%	55.6%		Full	55.6%	55.6%	
Banque Internationale pour le Commerce et l'Industrie du Burkina Faso	Burkina Faso	Full	51%	51%		Full	51%	51%	
Banque Internationale pour le Commerce et l'Industrie du Gabon	Gabon	Equity	47%	47%		Equity	47%	47%	
Banque Internationale pour le Commerce et l'Industrie du Mali	Mali	Full	85%	85%		Full	85%	85%	
Banque Internationale pour le Commerce et l'Industrie du Sénégal	Senegal	Full	54.1%	54.1%		Full	54.1%	54.1%	
Banque Marocaine pour le Commerce et l'Industrie	Morocco	Full	67%	67%		Full	67%	67%	
Banque Marocaine pour le Commerce et l'Industrie Banque Offshore	Morocco	Full	100%	67%		Full	100%	67%	
Banque pour l'Industrie et le Commerce des Comores	Comoros	Full	51%	51%		Full	51%	51%	E1
Bantas Nakit AS	Turkey	Equity (3)	33.3%	16.7%		Equity (3)	33.3%	16.7%	E1
BDSI	Morocco	Full	100%	96.4%	E1				
BGZ BNPP Faktoring Spolka ZOO	Poland	Full	100%	100%		Full	100%	100%	
BGZ Poland ABS1 DAC(s)	Ireland	Full	-	-		Full	-	-	
BICI Bourse	Ivory Coast	Full	90%	53.5%		Full	90%	53.5%	D1
BMCI Leasing	Morocco	Full	86.9%	58.2%		Full	86.9%	58.2%	
BNPP Bank Polska SA (Ex- Bank BGZ BNPP SA)	Poland	Full	88.8%	88.7%		Full	88.8%	88.7%	V4
BNPP El Djazair	Algeria	Full	100%	100%		Full	100%	100%	
BNPP Fortis Yatirimlar Holding AS	Turkey	Full	100%	99.9%		Full	100%	99.9%	
BNPP IRB Participations	France	Full	100%	100%		Full	100%	100%	
BNPP Solutions Spolka ZOO	Poland	Full	100%	88.7%		Full	100%	88.7%	E3
BNPP Yatirimlar Holding AS	Turkey	Full	100%	100%		Full	100%	100%	
IC Axa Insurance JSC	Ukraine				S2	Equity	49.8%	29.9%	
TEB Faktoring AS	Turkey	Full	100%	72.5%		Full	100%	72.5%	
TEB Holding AS	Turkey	Full	50%	50%		Full	50%	50%	
TEB Portfoy Yonetimi AS	Turkey	Full	100%	72.5%	V4	Full	54.8%	39.7%	V3
TEB SH A	Serbia	Full	100%	50%		Full	100%	50%	
TEB Yatirim Menkul Degerler AS	Turkey	Full	100%	72.5%		Full	100%	72.5%	
Turk Ekonomi Bankasi AS	Turkey	Full	100%	72.5%		Full	100%	72.5%	
UkrSibbank Public JSC	Ukraine	Full	60%	60%		Full	60%	60%	
Union Bancaire pour le Commerce et l'Industrie	Tunisia	Full	50.1%	50.1%		Full	50.1%	50.1%	
Insurance									
AEW Immocommercial(s)	France	FV	-	-		FV	-	-	E1
AG Insurance	Belgium	Equity	25%	25%		Equity	25%	25%	
Agathe Retail France	France	FV	33.3%	33.3%		FV	33.3%	33.3%	E1
Ambrosia Avril 2025(s)	France	Full (4)	-	-	V4	Full (4)	-	-	E1
Ambrosia Mars 2026(s)	France	Full (4)	-	-	E1				
Astridplaza	Belgium	Full (2)	100%	98.4%	E3				
Batipart Participations SAS	Luxemburg	FV	29.7%	29.7%		FV	29.7%	29.7%	E3
BNP Paribas Indice France (Ex- BNPP Indice France)(s)	France	Full (4)	-	-	E1				
BNPP ABS Europe AAA(s)	France				S4	Full (4)	-	-	E1
BNPP ABS Europe IG(s)	France				S4	Full (4)	-	-	E1
BNPP ABS Opportunities(s)	France				S4	Full (4)	-	-	E1
BNPP Actions Croissance (Ex- Camgestion Actions Croissance)(s)	France	Full (4)	-	-	V4	Full (4)	-	-	E1
BNPP Actions Entrepreneurs(s)	France	Full (4)	-	-	V4	Full (4)	-	-	E1
BNPP Actions Euro (Ex- Camgestion Actions Euro)(s)	France	Full (4)	-	-	V3	Full (4)	-	-	E1
BNPP Actions Monde(s)	France	Full (4)	-	-	V4	Full (4)	-	-	E1
BNPP Actions PME(s)	France	Full (4)	-	-	V3	Full (4)	-	-	E1
BNPP Aqua(s)	France	Full (4)	-	-	V4	Full (4)	-	-	
BNPP Best Selection Actions Euro (Ex- BNPP Actions Euroland)(s)	France	Full (4)	-	-	V3	Full (4)	-	-	
BNPP Cardif	France	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif BV	Netherlands	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif Compania de Seguros y Reaseguros SA	Peru	Equity*	100%	100%		Equity*	100%	100%	
BNPP Cardif Emeklilik AS	Turkey	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif General Insurance Co Ltd	Rep. of Korea	Equity	91.3%	91.3%	V4	Equity	90%	90%	
BNPP Cardif Hayat Sigorta AS	Turkey	Equity	100%	100%		Equity	100%	100%	

		31 December 2019				31 December 2018			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNPP Cardif Levensverzekeringen NV	Netherlands	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif Pojistovna AS	Czech Rep.	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif Schadeverzekeringen NV	Netherlands	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif Seguros de Vida SA	Chile	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif Seguros Generales SA	Chile	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif Servicios y Asistencia Ltda	Chile	Equity	100%	100%		Equity	100%	100%	
BNPP Cardif Sigorta AS	Turkey	Equity	100%	100%		Equity	100%	100%	E1
BNPP Cardif TCB Life Insurance Co Ltd	Taiwan	Equity	49%	49%		Equity	49%	49%	
BNPP Cardif Vita Compagnia di Assicurazione E Riassicurazione SPA	Italy	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Convictions(s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP CP Cardif Alternative(s)	France	Full (2)	-	-		Full (2)	-	-	
BNPP CP Cardif Private Debt(s)	France	Full (4)	-	-		Full (2)	-	-	
BNPP CP Infrastructure Investments Fund (Ex- Theam Infrastructure Investments fund)(s)	France	Full (4)	-	-	E1				
BNPP Deep Value (Ex- Camgestion Deep Value)(s)	France	Full (4)	-	-	E1				
BNPP Développement Humain(s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Diversipierre(s)	France	Full (2)	-	-		Full (2)	-	-	
BNPP Euro Valeurs Durables(s)	France				S3	Full (4)	-	-	E1
BNPP France Crédit(s)	France	Full (2)	-	-		Full (2)	-	-	
BNPP Global Senior Corporate Loans(s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Indice Amerique du Nord(s)	France	Full (4)	-	-	V4	Full (4)	-	-	E1
BNPP Indice Euro(s)	France				S3	Full (4)	-	-	
BNPP Midcap France(s)	France	Full (4)	-	-	V3	Full (4)	-	-	E1
BNPP Moderate Focus Italia(s)	France	Full (4)	-	-	E1				
BNPP Monétaire Assurance(s)	France				S3	Full (4)	-	-	E1
BNPP Multistratégies Protection 80(s)	France	Full (4)	-	-	E1				
BNPP Protection Monde(s)	France	Full (4)	-	-		Full (4)	-	-	E1
BNPP Rendactis (Ex- Camgestion Rendactis)(s)	France				S3	Full (4)	-	-	E1
BNPP Sélection Dynamique Monde(s)	France	Full (4)	-	-	V3	Full (4)	-	-	E1
BNPP Sélection Flexible(s)	France	Full (4)	-	-		Full (4)	-	-	E1
BNPP Smallcap Euroland(s)	France	Full (4)	-	-	E1				
BOB Cardif Life Insurance Co Ltd	China	Equity	50%	50%		Equity	50%	50%	
C Santé(s)	France	Full (2)	-	-		Full (2)	-	-	E1
Camgestion Obliflexible(s)	France	Full (2)	-	-		Full (2)	-	-	
CamGestion Obligations Europe(s)	France	Full (4)	-	-	E1				
Capital France Hotel	France	Full (2)	98.4%	98.4%		Full (2)	98,4%	98,4%	
Cardif Alternatives Part I(s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif Assurance Vie	France	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Austria branch)	Austria	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Belgium branch)	Belgium	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Bulgaria branch)	Bulgaria	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Germany branch)	Germany	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Italy branch)	Italy	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Japan branch)	Japan				S1	Full (2)	100%	100%	
Cardif Assurance Vie (Portugal branch)	Portugal	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Romania branch)	Romania	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Spain branch)	Spain	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Switzerland branch)	Switzerland	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Taiwan branch)	Taiwan	Full (2)	100%	100%		Full (2)	100%	100%	

		31 December 2019				31 December 2018			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
Cardif Assurances Risques Divers	France	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Austria branch)	Austria	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Belgium branch)	Belgium	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Bulgaria branch)	Bulgaria	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Germany branch)	Germany	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Italy branch)	Italy	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Japan branch)	Japan				S1	Full (2)	100%	100%	
Cardif Assurances Risques Divers (Luxemburg branch)	Luxemburg	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Poland branch)	Poland	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Portugal branch)	Portugal	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Romania branch)	Romania	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Spain branch)	Spain	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Switzerland branch)	Switzerland	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Taiwan branch)	Taiwan	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Biztosito Magyarorszag ZRT	Hungary	Equity	100%	100%		Equity	100%	100%	E1
Cardif BNPP AM Frontier Markets (Ex- Cardif BNPP IP Equity Frontier Markets)(s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif BNPP IP Convertibles World(s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif BNPP IP Global Senior Corporate Loans(s)	France	Full (4)	-	-	E1				
Cardif BNPP IP Signatures(s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif BNPP IP Smid Cap Euro(s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif BNPP IP Smid Cap Europe	France				S3	Full (2)	-	-	
Cardif Colombia Seguros Generales SA	Colombia	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif CPR Global Return(s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif do Brasil Seguros e Garantias SA	Brazil	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif do Brasil Vida e Previdencia SA	Brazil	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Edrim Signatures(s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif El Djazair	Algeria	Equity	100%	100%		Equity	100%	100%	
Cardif Forsakring AB	Sweden	Equity	100%	100%		Equity	100%	100%	
Cardif Forsakring AB (Denmark branch)	Denmark	Equity	100%	100%		Equity	100%	100%	
Cardif Forsakring AB (Norway branch)	Norway	Equity	100%	100%		Equity	100%	100%	
Cardif IARD	France	Full (2)	66%	66%		Full (2)	66%	66%	V3/ D1
Cardif Insurance Co LLC	Russia	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Life	Luxemburg				S4	Full (2)	100%	88.6%	E3/ V4
Cardif Life Insurance Co Ltd	Rep. of Korea	Full (2)	85%	85%		Full (2)	85%	85%	
Cardif Life Insurance Japan	Japan	Full (2)	75%	75%		Full (2)	75%	75%	E1
Cardif Livforsakring AB	Sweden	Equity	100%	100%		Equity	100%	100%	
Cardif Livforsakring AB (Denmark branch)	Denmark	Equity	100%	100%		Equity	100%	100%	
Cardif Livforsakring AB (Norway branch)	Norway	Equity	100%	100%		Equity	100%	100%	
Cardif Ltda	Brazil	Equity	100%	100%		Equity	100%	100%	E1
Cardif Lux Vie	Luxemburg	Full (2)	100%	88.6%		Full (2)	100%	88.6%	V1
Cardif Mexico Seguros de Vida SA de CV	Mexico	Equity	100%	100%		Equity	100%	100%	
Cardif Mexico Seguros Generales SA de CV	Mexico	Equity	100%	100%		Equity	100%	100%	
Cardif Non Life Insurance Japan	Japan	Full (2)	100%	75%		Full (2)	100%	75%	E1
Cardif Nordic AB	Sweden	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Pinnacle Insurance Holdings PLC	UK	Full (2)	100%	100%		Full (2)	100%	100%	

Name	Country	31 December 2019 Method	Voting (%)	Interest (%)	Ref.	31 December 2018 Method	Voting (%)	Interest (%)	Ref.
Cardif Pinnacle Insurance Management Services PLC	UK	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Polska Towarzystwo Ubezpieczen Na Zycie SA	Poland	Equity	100%	100%		Equity	100%	100%	
Cardif Seguros SA	Argentina	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Services AEIE	Portugal	Full (2)	100%	100%	E1				
Cardif Servicios SA	Argentina	Equity	100%	100%		Equity	100%	100%	
Cardif Servicios SAC	Peru	Equity	100%	100%		Equity	100%	100%	E1
Cardif Vita Convex Fund Eur(s)	France	Full (2)	-	-		Full (2)	-	-	
Cardimmo	France	Full (2)	100%	100%		Full (2)	100%	100%	
Cargeas Assicurazioni SPA	Italy	Full (2)	100%	100%		Full (2)	100%	100%	
Carma Grand Horizon SARL	France	Full (2)	100%	100%		Full (2)	100%	100%	
CB UK Ltd	UK				S1	Full (2)	100%	100%	
Cedrus Carbon Initiative Trends(s)	France	Full (2)	-	-		Full (2)	-	-	
CFH Algonquin Management Partners France Italia	Italy	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
CFH Bercy	France	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
CFH Bercy Hotel	France	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
CFH Bercy Intermédiaire	France	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
CFH Boulogne	France	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
CFH Cap d'Ail	France	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
CFH Milan Holdco SRL	Italy	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
CFH Montmartre	France	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
CFH Montparnasse	France	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
Corosa	France	Full (2)	100%	100%		Full (2)	100%	100%	
Darnell DAC	Ireland	Full (2)	100%	100%		Full (2)	100%	100%	
Défense CB3 SAS	France	FV	25%	25%		FV	25%	25%	E1
Eclair(s)	France	Full (4)	-	-	E1				
EP L(s)	France	Full (2)	-	-	V4	Full (2)	-	-	
Fleur SAS	France	FV	33.3%	33.3%		FV	33.3%	33.3%	E1
Foncière Partenaires(s)	France	FV	-	-		FV	-	-	E1
Fonds d'Investissements Immobiliers pour le Commerce et la Distribution	France	FV	25%	25%		FV	25%	25%	E1
FP Cardif Convex Fund USD(s)	France	Full (2)	-	-		Full (2)	-	-	
Fundamenta(s)	Italy	Full (2)	-	-		Full (2)	-	-	
G C Thematic Opportunities II(s)	Ireland	Full (2)	-	-		Full (2)	-	-	
GIE BNPP Cardif	France	Full (2)	100%	100%		Full (2)	100%	100%	V4
Harewood Helena 2 Ltd	UK	Full (2)	100%	100%		Full (2)	100%	100%	E1
Hemisphere Holding	France	Equity	20%	20%	E2				
Hibernia France	France	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
High Street Retail	France	FV	23.8%	23.8%	E1				
Horizon GmbH	Germany	FV	66.7%	66.7%	E3				
Icare	France	Full (2)	100%	100%		Full (2)	100%	100%	
Icare Assurance	France	Full (2)	100%	100%		Full (2)	100%	100%	
Luizaseg	Brazil	Equity	50%	50%		Equity	50%	50%	
Natio Assurance	France	Full (2)	100%	100%		Full (2)	100%	100%	V1
Natio Fonds Ampère 1(s)	France	Full (4)	-	-		Full (4)	-	-	
Natio Fonds Athenes Investissement N 5(s)	France	Full (2)	-	-		Full (2)	-	-	V4
Natio Fonds Colline International(s)	France	Full (2)	-	-		Full (2)	-	-	
Natio Fonds Collines Investissement N 1(s)	France	Full (2)	-	-		Full (2)	-	-	
Natio Fonds Collines Investissement N 3(s)	France	Full (2)	-	-		Full (2)	-	-	
NCVP Participacoes Societarias SA	Brazil	Full (2)	100%	100%		Full (2)	100%	100%	
New Alpha Cardif Incubator Fund(s)	France	Full (2)	-	-		Full (2)	-	-	
Opéra Rendement(s)	France	Full (2)	-	-		Full (2)	-	-	
Paris Management Consultant Co Ltd	Taiwan	Equity	100%	100%	E1				
Permal Cardif Co Investment Fund(s)	France	Full (2)	-	-		Full (2)	-	-	
Pinnacle Insurance PLC	UK	Full (2)	100%	100%		Full (2)	100%	100%	
Poistovna Cardif Slovakia AS	Slovakia	Equity	100%	100%		Equity	100%	100%	
Preim Healthcare SAS(s)	France	FV	-	-		FV	-	-	E1
PWH	France	FV	47.4%	47.4%		FV	47,4%	47,4%	E1
Reumal Investissements	France	Full (2)	100%	100%		Full (2)	100%	100%	
Rubin SARL	Luxemburg	FV	50%	50%		FV	50,0%	50,0%	E1
Rueil Ariane	France	Full (2)	100%	100%		Full (2)	100%	100%	
SAS HVP	France	Full (2)	100%	98.4%		Full (2)	100%	98.4%	V3
SCI 68/70 rue de Lagny - Montreuil	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Alpha Park	France	FV	50%	50%		FV	50%	50%	E1
SCI BNPP Pierre I	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI BNPP Pierre II	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Bobigny Jean Rostand	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Bouleragny	France	FV	50%	50%		FV	50%	50%	E1
SCI Cardif Logement	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Citylight Boulogne	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Clichy Nuovo	France	FV	50%	50%		FV	50%	50%	E1
SCI Défense Etoile	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Défense Vendôme	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Etoile du Nord	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Fontenay Plaisance	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Imefa Velizy	France	FV	21.8%	21.8%		FV	21.8%	21.8%	E1
SCI Le Mans Gare	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Liberté	France	FV	50%	50%		FV	50%	50%	E1
SCI Nanterre Guilleraies	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Nantes Carnot	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Odyssée	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Pantin Les Moulins	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Paris Batignolles	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Paris Cours de Vincennes	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Paris Turenne	France	Full (2)	100%	100%	E2				
SCI Portes de Claye	France	Equity	45%	45%		Equity	45%	45%	
SCI Rue Moussorgski	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Rueil Caudron	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Saint Denis Landy	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Saint Denis Mitterrand	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI Saint-Denis Jade	France	Full (2)	100%	100%		Full (2)	100%	100%	
SCI SCOO	France	Equity	46.4%	46.4%		Equity	46.4%	46.4%	
SCI Vendôme Athènes	France	FV	50%	50%		FV	50%	50%	E1
SCI Villeurbanne Stalingrad	France	Full (2)	100%	100%		Full (2)	100%	100%	
Secar	France	FV	55.1%	55.1%	V2	FV	59%	59%	E1
Seniorenzentren Deutschland Holding SARL(s)	Luxemburg	FV	20%	17.7%		FV	-	-	E1
Seniorenzentren Reinbeck Oberursel München Objekt GmbH	Germany	FV	35%	31%		FV	35%	31%	E3
Seniorenzentrum Butzbach Objekt GmbH	Germany	FV	35%	31%		FV	35%	31%	E3
Seniorenzentrum Heilbronn Objekt GmbH	Germany	FV	35%	31%		FV	35%	31%	E3
Seniorenzentrum Kassel Objekt GmbH	Germany	FV	35%	31%		FV	35%	31%	E3
Seniorenzentrum Wolfratshausen Objekt GmbH	Germany	FV	35%	31%		FV	35%	31%	E3
Société Francaise d'Assurances sur la Vie	France	Equity	50%	50%		Equity	50%	50%	
Société Immobilière du Royal Building SA	Luxemburg	Full (2)	100%	88.6%		Full (2)	100%	88.6%	V4
State Bank of India Life Insurance Co Ltd	India				S2	Equity	22%	22%	
Tikehau Cardif Loan Europe(s)	France	Full (2)	-	-		Full (2)	-	-	
Valeur Pierre Epargne	France	Full (2)	100%	100%		Full (2)	100%	100%	
Valtitres FCP(s)	France	Full (2)	-	-		Full (2)	-	-	
Velizy SAS	France	FV	33.3%	33.3%		FV	33.3%	33.3%	E1
Vietcombank Cardif Life Insurance Co Ltd	Viet Nam	Equity	55%	55%	V1	Equity	43%	43%	E1
Wealth Management									
BNPP Espana SA	Spain				S4	Full	99.7%	99.7%	
BNPP Wealth Management Monaco	Monaco	Full (1)	100%	100%		Full (1)	100%	100%	
Asset Management									
Alfred Berg Asset Management AB	Sweden								S4
Alfred Berg Kapitalforvaltning AB	Sweden	Full	100%	98.2%		Full	100%	98.2%	V3
Alfred Berg Kapitalforvaltning AS	Norway	Full	100%	98.2%		Full	100%	98.2%	V3
Alfred Berg Kapitalforvaltning AS (Sweden branch)	Sweden	Full	100%	98.2%	E2				
Bancoestado Administradora General de Fondos SA	Chile	Equity	50%	49.1%		Equity	50%	49.1%	V3
BNPP Asset Management Asia Ltd	Hong Kong	Full	100%	98.2%		Full	100%	98.2%	V3
BNPP Asset Management Be Holding	Belgium	Full	100%	98.2%		Full	100%	98.2%	V3
BNPP Asset Management Belgium	Belgium	Full	100%	98.2%		Full	100%	98.2%	V3
BNPP Asset Management Belgium (Germany branch)	Germany				S1	Full	100%	98.2%	V3
BNPP Asset Management Brasil Ltda	Brazil	Full	100%	99.5%		Full	100%	99.5%	V3
BNPP Asset Management France	France	Full	100%	98.2%		Full	100%	98.2%	V3
BNPP Asset Management France (Austria branch)	Austria	Full	100%	98.2%		Full	100%	98.2%	V3
BNPP Asset Management France (Germany branch)	Germany	Full	100%	98.2%	E2				
BNPP Asset Management France (Italy branch)	Italy	Full	100%	98.2%		Full	100%	98.2%	E2
BNPP Asset Management Holding	France	Full	99.9%	98.2%		Full	99.9%	98.2%	V3
BNPP Asset Management India Private Ltd	India	Full	100%	98.2%		Full	100%	98.2%	D1

		31 December 2019				31 December 2018			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNPP Asset Management Japan Ltd	Japan	Full	100%	98.2%		Full	100%	98.2%	V3
BNPP Asset Management Luxembourg	Luxemburg	Full	99.7%	97.9%		Full	99.7%	97.9%	V3
BNPP Asset Management Nederland NV	Netherlands	Full	100%	98.2%		Full	100%	98.2%	V3
BNPP Asset Management Netherlands NV	Netherlands				S4	Full	100%	98.3%	
BNPP Asset Management NL Holding NV	Netherlands	Full	100%	98.2%		Full	100%	98.2%	V3
BNPP Asset Management PT (Ex- BNPP Investment Partners PT)	Indonesia	Full	100%	98.2%		Full	100%	98.2%	V3
BNPP Asset Management Services Grouping	France	Full	100%	98.2%		Full	100%	98.2%	E1/V3
BNPP Asset Management UK Ltd	UK	Full	100%	98.2%		Full	100%	98.2%	V3
BNPP Asset Management USA Holdings Inc	USA	Full	100%	100%		Full	100%	100%	
BNPP Asset Management USA Inc	USA	Full	100%	100%		Full	100%	100%	
BNPP B Control(s)	Belgium	Full	-	-	E1				
BNPP B Institutional II(s)	Belgium	Full	-	-		Full	-	-	
BNPP Capital Partners	France	Full	100%	100%		Full	100%	100%	D1
BNPP Dealing Services	France	Full (1)	100%	98.2%		Full (1)	100%	98.2%	V3
BNPP Dealing Services (United Kingdom branch)	UK								S1
BNPP Funds (Ex- Parvest)(s)	Luxemburg	Full (4)	-	-		Full (4)	-	-	E1
BNPP Investment Partners SGR SPA	Italy								S4
BNPP L1(s)	Luxemburg	Full (4)	-	-		Full (4)	-	-	E1
BNPP Perspectives(s)	France	Full (4)	-	-		Full (4)	-	-	E1
EAB Group PLC (Ex- Elite Asset Management PLC)	Finland	Equity	17.6%	17.3%	V3	Equity	19%	18.7%	V3
EMZ Partners	France				S2	Equity	24.9%	24.9%	E1
Fund Channel	Luxemburg	Equity (3)	50%	49.1%		Equity (3)	50%	49.1%	V3
Fundquest	France				S3	Full (4)	-	-	E1
Fundquest Advisor	France	Full	100%	98.2%		Full	100%	98.2%	D1/ V3
Fundquest Advisor (United kingdom branch)	UK	Full	100%	98.2%		Full	100%	98.2%	D1/ V3
Gambit Financial Solutions	Belgium	Full	86%	84.4%		Full	86%	84.4%	E1/V3
Groeivermogen NV	Netherlands	Full	100%	98.2%		Full	100%	98.2%	E1
Haitong Fortis Private Equity Fund Management Co Ltd	China	Equity	33%	32.4%		Equity	33%	32.4%	
Harewood Helena 1 Ltd	UK	Full	100%	100%		Full	100%	100%	E1
HFT Investment Management Co Ltd	China	Equity	49%	48.1%		Equity	49%	48.1%	V3
Impax Asset Management Group PLC	UK	Equity	24.5%	24%		Equity	24.5%	24%	V3
Parworld(s)	Luxemburg	Full	-	-		Full (4)	-	-	E1
Services Epargne Entreprise	France	Equity	37.1%	37.1%		Equity	37.1%	37.1%	E1
Shinhan BNPP Asset Management Co Ltd	Rep. of Korea	Equity	35%	34.4%		Equity	35%	34.4%	V3
SME Alternative Financing DAC(s)	Ireland	Full	-	-		Full	-	-	E1
Theam Quant(s)	Luxemburg	Full (4)	-	-		Full (4)	-	-	E1
Real Estate Services									
99 West Tower GmbH (Ex- 99 West Tower GmbH & Co KG)	Germany				S2	Full	100%	100%	
99 West Tower GP GmbH	Germany				S3	Full	100%	100%	
Auguste Thouard Expertise	France	Full (2)	100%	100%		Full	100%	100%	
BNPP Immobilier Promotion Immobilier d'Entreprise	France	Full (2)	100%	100%		Full	100%	100%	
BNPP Immobilier Promotion Résidentiel	France								S4
BNPP Immobilier Résidences Services	France	Full (2)	100%	100%		Full	100%	100%	
BNPP Immobilier Résidentiel	France	Full (2)	100%	100%		Full	100%	100%	
BNPP Immobilier Résidentiel Service Clients	France	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate	France	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate (United arab emirates branch)	United Arab Emirates	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory & Property Management Luxembourg SA	Luxemburg	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory & Property Management UK Ltd	UK	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory and Property Management Ireland Ltd	Ireland	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory Belgium SA	Belgium	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory Italy SPA	Italy	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory Netherlands BV	Netherlands	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Advisory SA	Romania	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate APM CR SRO	Czech Rep.	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Conseil Habitation & Hospitality	France	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Consult France	France	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Consult GmbH	Germany	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Facilities Management Ltd	UK	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Financial Partner	France	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate GmbH	Germany	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Holding Benelux SA	Belgium	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Holding GmbH	Germany	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Holding Netherlands BV	Netherlands								S4
BNPP Real Estate Investment Management Belgium	Belgium	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management France	France	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Germany GmbH	Germany	Full	94.9%	94.9%		Full	94.9%	94.9%	
BNPP Real Estate Investment Management Germany GmbH (Italy branch)	Italy	Full	94.9%	94.9%		Full	94.9%	94.9%	
BNPP Real Estate Investment Management Germany GmbH (Spain branch)	Spain	Full	94.9%	94.9%		Full	94.9%	94.9%	
BNPP Real Estate Investment Management Italy SPA	Italy	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Ltd	UK	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Luxembourg SA	Luxemburg	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Spain SA	Spain	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management UK Ltd	UK	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Services	France								S4
BNPP Real Estate Italy SRL	Italy	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Magyarorszag Tanacsado Es Ingatlankezelo ZRT	Hungary	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Poland SP ZOO	Poland	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Portugal Unipersonal LDA	Portugal	Full (2)	100%	100%	E2				
BNPP Real Estate Property Development & Services GmbH (Ex- BNPP Real Estate Investment Management International GmbH)	Germany	Full (2)	100%	100%		Full	100%	100%	E2
BNPP Real Estate Property Development UK Ltd	UK	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Property Developpement Italy SPA	Italy	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Property Management Belgium	Belgium	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Property Management France SAS	France	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Property Management GmbH	Germany	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Property Management Italy SRL	Italy	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Property Management Spain SA	Spain								S4
BNPP Real Estate Singapore Pte Ltd	Singapore	Full (2)	100%	100%	E2				
BNPP Real Estate Spain SA (Ex- BNPP Real Estate Advisory Spain SA)	Spain	Full (2)	100%	100%		Full	100%	100%	
BNPP Real Estate Transaction France	France	Full (2)	96.5%	96.5%	V4	Full	96%	96%	V2
BNPP Real Estate Valuation France	France	Full (2)	100%	100%		Full	100%	100%	
Cariboo Development SL	Spain	Equity	75,0%	75,0%	E3				
Construction-Sale Companies (d)	France	Full/ Equity (2)	-	-		Full/ Equity	-	-	
GIE Siège Issy	France	Full (2)	100%	100%		Full	100%	100%	
Horti Milano SRL	Italy	Full (2)	100%	100%		Full	100%	100%	
Lifizz	France	Full (2)	100%	100%		Full	100%	100%	E2
Locchi SRL	Italy								S3
Parker Tower Ltd	UK	Full (2)	100%	100%		Full	100%	100%	
Partner's & Services	France	Full (2)	100%	100%		Full	100%	100%	
Pyrotex GB 1 SA	luxemburg								S4
Pyrotex SARL	Luxemburg				S1	Full	100%	100%	

		31 December 2019					31 December 2018				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
REPD Parker Ltd	UK	Full	(2)	100%	100%		Full		100%	100%	
Société Auxiliaire de Construction Immobilière	France	Full	(2)	100%	100%		Full		100%	100%	
Sviluppo Residenziale Italia SRL	Italy	Full	(2)	100%	100%		Full		100%	100%	
Territory of Switzerland											
BNPP Suisse SA	Switzerland	Full		100%	100%		Full		100%	100%	
BNPP Suisse SA (Guernsey branch)	Guernsey	Full		100%	100%		Full		100%	100%	
Corporate & Institutional Banking											
Securities Services											
BNPP Financial Services LLC	USA	Full		100%	100%		Full		100%	100%	E1
BNPP Fund Administration Services Ireland Ltd	Ireland	Full		100%	100%		Full		100%	100%	
BNPP Fund Services Australasia Pty Ltd	Australia	Full		100%	100%		Full		100%	100%	D1
BNPP Fund Services Australasia Pty Ltd (New zealand branch)	New Zealand	Full		100%	100%		Full		100%	100%	D1
BNPP Global Securities Operations Private Ltd	India	Full		100%	100%		Full		100%	100%	
BNPP Securities Services	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Australia branch)	Australia	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Belgium branch)	Belgium	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Germany branch)	Germany	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Greece branch)	Greece	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Guernsey branch)	Guernsey	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Hong Kong branch)	Hong Kong	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Hungary branch)	Hungary	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Ireland branch)	Ireland	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Italy branch)	Italy	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Jersey branch)	Jersey	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Luxemburg branch)	Luxemburg	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Netherlands branch)	Netherlands	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Poland branch)	Poland	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Portugal branch)	Portugal	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Singapore branch)	Singapore	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Spain branch)	Spain	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (Switzerland branch)	Switzerland	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services (United kingdom branch)	UK	Full	(1)	100%	100%		Full	(1)	100%	100%	
Services Logiciels d'Intégration Boursière	France	Equity	(3)	66.6%	66.6%		Equity	(3)	66.6%	66.6%	E1
CIB EMEA (Europe, Middle East, Africa)											
France											
Atargatis(s)	France	Full		-	-		Full		-	-	
Auseter Real Estate Opportunities SARL(s)	Luxemburg	Full		-	-		Full		-	-	E1
Austin Finance(s)	France	Full		-	-		Full		-	-	
BNPP Arbitrage	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Arbitrage (United Kingdom branch)	UK										S1
Compagnie d'Investissement Italiens(s)	France	Full		-	-		Full		-	-	
Compagnie d'Investissement Opéra(s)	France	Full		-	-		Full		-	-	
Esomet	France	Full		100%	100%		Full		100%	100%	
Eurotitrisation	France	Equity		23%	23%		Equity		23%	23%	E1
FCT Juice(s)	France	Full		-	-		Full		-	-	E2
Financière des Italiens(s)	France	Full		-	-		Full		-	-	
Financière du Marché Saint Honoré	France	Full		100%	100%		Full		100%	100%	
Financière Paris Haussmann(s)	France	Full		-	-		Full		-	-	

		31 December 2019					31 December 2018				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
Financière Taitbout(s)	France	Full		-	-		Full		-	-	
Laffitte Participation 22	France					S4	Full		100%	100%	
Mediterranea(s)	France	Full		-	-		Full		-	-	
Opéra Trading Capital	France					S4	Full		100%	100%	
Opéra Trading Capital (Hong kong branch)	Hong Kong					S4	Full		100%	100%	
Opéra Trading Capital (United kingdom branch)	UK					S4	Full		100%	100%	
Optichamps(s)	France	Full		-	-		Full		-	-	
Parilease	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Participations Opéra(s)	France	Full		-	-		Full		-	-	
SNC Taitbout Participation 3	France	Full		100%	100%		Full		100%	100%	
Société Orbaisienne de Participations	France	Full		100%	100%		Full		100%	100%	
Verner Investissements	France	Equity		40%	50%		Equity		40%	50%	
Other European countries											
Alectra Finance PLC(s)	Ireland	Full		-	-		Full		-	-	
Alpha Murcia Holding BV	Netherlands										S1
Aquarius + Investments PLC(s)	Ireland	Full		-	-		Full		-	-	
Aries Capital DAC(s)	Ireland	Full		-	-		Full		-	-	
BNP PUK Holding Ltd	UK	Full		100%	100%		Full		100%	100%	
BNPP Bank JSC	Russia	Full		100%	100%		Full		100%	100%	
BNPP Commodity Futures Ltd	UK					S4	Full		100%	100%	
BNPP Emissions- Und Handels- GmbH	Germany	Full		100%	100%		Full		100%	100%	
BNPP International Finance Dublin Unlimited Company(s)	Ireland					S3	Full		-	-	
BNPP Invest Holdings BV	Netherlands	Full		100%	100%		Full		100%	100%	
BNPP Investments N 1 Ltd(s)	UK										S1
BNPP Investments N 2 Ltd(s)	UK										S1
BNPP Ireland Unlimited Co	Ireland	Full		100%	100%		Full		100%	100%	
BNPP Islamic Issuance BV	Netherlands	Full		100%	100%		Full		100%	100%	
BNPP Issuance BV	Netherlands	Full		100%	100%		Full		100%	100%	
BNPP Net Ltd	UK	Full		100%	100%		Full		100%	100%	D1
BNPP Prime Brokerage International Ltd	Ireland	Full		100%	100%		Full		100%	100%	
BNPP UK Holdings Ltd	UK					S3	Full		100%	100%	
BNPP UK Ltd	UK										S3
BNPP Vartry Reinsurance DAC	Ireland	Full	(2)	100%	100%		Full		100%	100%	D1
Boug BV(s)	Netherlands					S1	Full		-	-	
Boug BV (United kingdom branch)(s)	UK					S1	Full		-	-	
Diamante Re SRL	Italy	Full		100%	100%		Full		100%	100%	E1
Ejesur SA	Spain	Full		100%	100%		Full		100%	100%	E1
Financière Hime SA	Luxemburg					S3	Equity		22.5%	22.5%	
FScholen	Belgium	Equity	(3)	50%	50%		Equity	(3)	50%	50%	
Greenstars BNPP	Luxemburg	Full	(2)	100%	100%	D1	Equity		100%	100%	
Harewood Holdings Ltd	UK					S3	Full		100%	100%	
Hime Holding 1 SA	Luxemburg					S3	Equity		26.4%	26.4%	
Hime Holding 2 SA	Luxemburg					S3	Equity		21%	21%	
Hime Holding 3 SA	Luxemburg					S3	Equity		20.6%	20.6%	
Landspire Ltd	UK					S1	Full		100%	100%	
Madison Arbor Ltd(s)	Ireland	Full		-	-		Full		-	-	
Matchpoint Finance PLC(s)	Ireland	Full		-	-		Full		-	-	
Ribera Del Loira Arbitrage	Spain	Full		100%	100%		Full		100%	100%	E1
Scaldis Capital Ltd(s)	Jersey	Full		-	-		Full		-	-	
Utexam Logistics Ltd	Ireland	Full		100%	100%		Full		100%	100%	
Utexam Solutions Ltd	Ireland	Full		100%	100%		Full		100%	100%	
Middle East											
BNPP Investment Co KSA	Saudi Arabia	Full		100%	100%		Full		100%	100%	D1
Americas											
Banco BNPP Brasil SA	Brazil	Full		100%	100%		Full		100%	100%	
Banexi Holding Corp	USA										S4
BNPP Canada Corp	Canada	Full		100%	100%		Full		100%	100%	
BNPP Capital Services Inc	USA	Full		100%	100%		Full		100%	100%	
BNPP CC Inc	USA										S4
BNPP Colombia Corporacion Financiera SA	Colombia	Full		100%	100%		Full		100%	100%	
BNPP Energy Trading GP	USA	Full		100%	100%		Full		100%	100%	
BNPP Energy Trading LLC	USA	Full		100%	100%		Full		100%	100%	
BNPP EQD Brazil Fund Fundo de Investmento Multimercado(s)	Brazil	Full		-	-		Full		-	-	
BNPP FS LLC	USA	Full		100%	100%		Full		100%	100%	
BNPP IT Solutions Canada Inc	Canada	Full		100%	100%		Full		100%	100%	
BNPP Prime Brokerage Inc	USA										S4

Name	Country	31 December 2019					31 December 2018				
		Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
BNPP Proprietario Fundo de Investimento Multimercado(s)	Brazil	Full		-	-		Full		-	-	
BNPP RCC Inc	USA	Full		100%	100%		Full		100%	100%	
BNPP Securities Corp	USA	Full		100%	100%		Full		100%	100%	
BNPP US Investments Inc (Ex- BNPP Energy Trading Holdings Inc)	USA	Full		100%	100%		Full		100%	100%	
BNPP US Wholesale Holdings Corp	USA	Full		100%	100%		Full		100%	100%	
BNPP USA Inc	USA	Full		100%	100%		Full		100%	100%	
BNPP VPG Adonis LLC(s)	USA	Full		-	-		Full		-	-	
BNPP VPG Brookfin LLC(s)	USA	Full		-	-		Full		-	-	
BNPP VPG Brookline Cre LLC(s)	USA	Full		-	-		Full		-	-	
BNPP VPG CT Holdings LLC(s)	USA	Full		-	-		Full		-	-	
BNPP VPG EDMC Holdings LLC(s)	USA	Full		-	-		Full		-	-	
BNPP VPG Express LLC(s)	USA	Full		-	-		Full		-	-	
BNPP VPG Freedom Communications LLC(s)	USA										S1
BNPP VPG Legacy Cabinets LLC(s)	USA										S1
BNPP VPG Mark IV LLC(s)	USA										S1
BNPP VPG Master LLC(s)	USA	Full		-	-		Full		-	-	
BNPP VPG Medianews Group LLC(s)	USA										S1
BNPP VPG Northstar LLC(s)	USA										S1
BNPP VPG Pacex LLC(s)	USA										S1
BNPP VPG PCMC LLC(s)	USA										S1
BNPP VPG SBX Holdings LLC(s)	USA										S1
Dale Bakken Partners 2012 LLC	USA	FV		23.8%	23.8%		FV		23.8%	23.8%	E1
Decart Re Ltd(s)	Bermuda	Full	(2)	-	-		Full	(2)	-	-	E1
FSI Holdings Inc	USA	Full		100%	100%		Full		100%	100%	
Starbird Funding Corp(s)	USA	Full		-	-		Full		-	-	
Via North America Inc	USA										S4
Pacific Asia											
Bank BNPP Indonesia PT	Indonesia	Full		100%	100%		Full		100%	100%	
BNP Pacific Australia Ltd	Australia										S3
BNPP Amber Holdings Pty Ltd	Australia					S3	Full		100%	100%	
BNPP Arbitrage Hong Kong Ltd	Hong Kong	Full		100%	100%		Full		100%	100%	
BNPP China Ltd	China	Full		100%	100%		Full		100%	100%	
BNPP Commodities Trading Shanghai Co Ltd	China	Full		100%	100%		Full		100%	100%	
BNPP Finance Hong Kong Ltd	Hong Kong	Full		100%	100%		Full		100%	100%	
BNPP India Holding Private Ltd	India	Full		100%	100%		Full		100%	100%	
BNPP India Solutions Private Ltd	India	Full		100%	100%		Full		100%	100%	
BNPP Malaysia Berhad	Malaysia	Full		100%	100%		Full		100%	100%	
BNPP Securities Asia Ltd	Hong Kong	Full		100%	100%		Full		100%	100%	
BNPP Securities India Private Ltd	India	Full		100%	100%		Full		100%	100%	
BNPP Securities Japan Ltd	Japan	Full		100%	100%		Full		100%	100%	
BNPP Securities Korea Co Ltd	Rep. of Korea	Full		100%	100%		Full		100%	100%	

Name	Country	31 December 2019					31 December 2018				
		Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
BNPP Securities Singapore Pte Ltd	Singapore					S3	Full		100%	100%	
BNPP Securities Taiwan Co Ltd	Taiwan	Full		100%	100%		Full		100%	100%	
BNPP Sekuritas Indonesia PT	Indonesia	Full		99%	99%		Full		99%	99%	
BPP Holdings Pte Ltd	Singapore	Full		100%	100%		Full		100%	100%	
Other Business Units											
Property companies (property used in operations) and others											
Antin Participation 5	France	Full		100%	100%		Full		100%	100%	
BNPP Home Loan SFH	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Partners for Innovation	France	Equity		50%	50%		Equity		50%	50%	
BNPP Procurement Tech	France	Full		100%	100%		Full		100%	100%	E1
BNPP Public Sector SCF	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Cobema	Belgium										S4
Euro Secured Notes Issuer(s)	France	Full		-	-		Full		-	-	
FCT Laffitte 2016(s)	France	Full		-	-		Full		-	-	
FCT Opéra 2014(s)	France	Full		-	-		Full		-	-	
GIE Groupement Auxiliaire de Moyens	France	Full		100%	100%		Full		100%	100%	
GIE Groupement d'Etudes et de Prestations	France	Full		100%	100%		Full		100%	100%	E1
Société Immobilière du Marché Saint-Honoré	France										S2

(a) At 31 December 2019, the securitisation funds Ecarat UK includes 5 funds (Ecarat PLC 6 to 10), versus 4 funds (Ecarat PLC 6 to 9) at 31 December 2018
(b) At 31 December 2019 the securitisation funds UCI and RMBS Prado include 15 funds (FCC UCI 9 to 12, 14 to 17, Fondo de Titulizacion Structured Covered Bonds and RMBS Prado I to VI) versus 14 funds (FCC UCI 9 to 12, 14 to 17 and RMBS Prado I to VI) at 31 December 2018
(c) At 31 December 2019 and at 31 December 2018, the securitisation funds Domos comprise these funds : Domos 2011 and Domos 2017
(d) At 31 December 2019, 103 Construction-sale companies (84 Full and 19 Equity) versus 95 at 31 December 2018 (77 Full and 18 Equity)
(e) At 31 December 2019, 11 Private Equity investment entities versus 8 entities at 31 December 2018

As requested by the ANC 2016 regulation, the list of entities that are controlled by the Group, jointly controlled or under significant influence, but excluded from the scope of consolidation since their contribution to the consolidated financial statements would be immaterial to the Group, and the list of equity investments, are available on the "Regulated Information" page of the https://invest.bnpparibas.com website.

Changes in the scope of consolidation
New entries (E) in the scope of consolidation
E1 Passing qualifying thresholds
E2 Incorporation
E3 Purchase, gain of control or significant influence
Removals (S) from the scope of consolidation
S1 Cessation of activity (dissolution, liquidation…)
S2 Disposal, loss of control or loss of significant influence
S3 Passing qualifying thresholds
S4 Merger, Universal transfer of assets and liabilities
Variance (V) in voting or ownership interest
V1 Additional purchase
V2 Partial disposal
V3 Dilution
V4 Increase in %

Miscellaneous
D1 Consolidation method change not related to fluctuation in voting or ownership interest
Equity Controlled but non material entities consolidated under the equity method as associates
FV Joint control or investment in associates measured at Fair Value through P&L
(s) Structured entities

Prudential scope of consolidation
(1) French subsidiaries whose supervision of prudential requirements is complied with through the supervision on a consolidated basis of BNP Paribas SA, in accordance with article 7.1 of Regulation n°575/2013 of the European Parliament and of the Council
(2) Entities consolidated under the equity method in the prudential scope
(3) Jointly controlled entities under proportional consolidation in the prudential scope
(4) Collective investment undertaking excluded from the prudential scope.

8.k FEES PAID TO THE STATUTORY AUDITORS

Year to 31 Dec. 2019 *Excluding tax, in thousands of euros*	Deloitte		PricewaterhouseCoopers		Mazars		TOTAL	
	Total	%	Total	%	Total	%	Total	%
Statutory audits and contractual audits, including	15,043	79%	17,925	74%	11,654	87%	44,622	79%
Issuer	3,469		4,677		2,419		10,565	
Consolidated subsidiaries	11,574		13,248		9,235		34,057	
Services other than those required for their statutory audit engagement, including	3,929	21%	6,391	26%	1,729	13%	12,049	21%
Issuer	521		1,994		1,089		3,604	
Consolidated subsidiaries	3,408		4,397		640		8,445	
TOTAL	**18,972**	**100%**	**24,316**	**100%**	**13,383**	**100%**	**56,671**	**100%**
of which fees paid to Statutory Auditors in France for the statutory audit and contractual audit	*3,994*		*5,478*		*4,761*		*14,233*	
of which fees paid to Statutory Auditors in France for services other than those required for their statutory audit engagements	*787*		*1,832*		*1,075*		*3,694*	

Year to 31 Dec. 2018 *Excluding tax, in thousands of euros*	Deloitte		PricewaterhouseCoopers		Mazars		TOTAL	
	Total	%	Total	%	Total	%	Total	%
Statutory audits and contractual audits, including	15,289	75%	15,712	61%	12,104	90%	43,105	73%
Issuer	3,899		4,462		2,515		10,876	
Consolidated subsidiaries	11,390		11,250		9,589		32,229	
Services other than those required for their statutory audit engagement, including	5,108	25%	9,898	39%	1,326	10%	16,332	27%
Issuer	1,526		3,175		712		5,413	
Consolidated subsidiaries	3,582		6,723		614		10,919	
TOTAL	**20,397**	**100%**	**25,610**	**100%**	**13,430**	**100%**	**59,437**	**100%**
of which fees paid to Statutory Auditors in France for the statutory audit and contractual audit	*4,318*		*4,477*		*4,936*		*13,731*	
of which fees paid to Statutory Auditors in France for services other than those required for their statutory audit engagements	*398*		*2,091*		*609*		*3,098*	

The audit fees paid to auditors which are not members of the network of one of the auditors certifying the consolidated financial statements and the non-consolidated financial statements of BNP Paribas SA, mentioned in the table above, amount to EUR 876 thousand for the year 2019 (EUR 507 thousand in 2018).

Services other than those required for the statutory audit engagement are mainly composed this year of reviews of the entity's compliance with regulatory requirements, and reviews of Internal Control quality by comparison with international standards (such as ISAE 3402) as part of services provided to customers, particularly in the Securities and Asset Management businesses, and expertise on the Bank's transformation projects.

4.7 Statutory Auditors' report on the consolidated financial statements

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
6, place de la Pyramide 92908 Paris La Défense Cedex	63, rue de Villiers 92208 Neuilly-sur-Seine Cedex	61, rue Henri Regnault 92400 Courbevoie

For the year ended 31 December 2019

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

BNP Paribas SA

16, boulevard des Italiens

75009 Paris

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying consolidated financial statements of BNP Paribas SA for the year ended 31 December 2019.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group at 31 December 2019 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Financial Statements Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us, for the period from 1 January 2019 to the date of our report, and, in particular, we did not provide any non-audit services prohibited by article 5(1) of Regulation (EU) No. 537/2014 or the French Code of Ethics (Code de déontologie) for Statutory Auditors.

Emphasis of matter

Without qualifying our opinion, we draw your attention to Notes 1.a.1 and 2 to the consolidated financial statements, which describe the impact on the consolidated financial statements for the year ended 31 December 2019 of the application of IFRS 16 "Leases".

Justification of assessments – Key audit matters

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code (Code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were the most significant in our audit of the consolidated financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the consolidated financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the consolidated financial statements.

Assessment of credit risk and measurement of impairment losses (stages1, 2 and 3) on customer loan portfolios

(See Notes 1.e.5, 1.e.6, 1.o, 3.h, 5.e, 5.f and 5.p to the consolidated financial statements)

Description of risk	How our audit addressed this risk
BNP Paribas recognises impairment losses to hedge the credit risks inherent to its banking intermediation activities. Since 1 January 2018, these impairment losses have been determined in accordance with IFRS 9 and the expected credit losses model. The measurement of expected credit losses on customer loan portfolios requires management to exercise judgement, in particular in order to: ■ assess the significant deterioration of credit risk to classify outstandings in stage 1, stage 2, or stage 3; ■ estimate the amount of expected losses according to the different stages; ■ prepare macro-economic projections which are integrated into both the criteria for recognising deterioration and in the measurement of expected losses. At 31 December 2019, total outstanding customer loans exposed to credit risk amounted to EUR 827 billion, while total impairment losses stood at EUR 21 billion. We deemed the assessment of credit risk and the measurement of impairment losses to be a key audit matter insofar as management is required to exercise judgement and make estimates to assess credit risk, in particular as regards credit granted to companies given the potentially substantial amounts of the outstanding loans concerned.	We concentrated our work on the most significant outstandings and/or customer loan portfolios at the reporting date as well as on the credit granted to companies operating in more sensitive economic sectors or geographic regions. We assessed the relevance of BNP Paribas' internal control system and tested the manual and computerised controls for assessing credit risk and measuring expected losses. During our work, we focused on: ■ classification of outstandings by stage: we assessed the relevance and the correct application of the indicators applicable to the various business lines to measure significant increases in credit risk, in particular as regards the rating of corporate counterparties; ■ measurement of expected losses (stages 1, 2 and 3); ▪ assisted by our credit risk experts and relying on the internal system for independent validation of BNP Paribas' models, we assessed the methodologies as well as the assumptions underlying the macro-economic projections used by BNP Paribas across the various business lines, the proper integration of said projections into the information system and the effectiveness of the data quality controls, ▪ with regard to impairment losses on outstanding loans to companies classified in stage 3, we verified that a periodic review of the counterparties under surveillance had been carried out by BNP Paribas and based on a sample, assessed the assumptions and data used by management to estimate impairment. In addition, we examined the disclosures in the notes to the consolidated financial statements with respect to credit risk and particularly the disclosures required by IFRS 9 regarding credit risk.

Valuation of financial instruments

(See Notes 1.e.2, 1.e.7, 1.e.10, 1.o, 3.a, 3.c, 3.d, 5.a, 5.b, 5.c and 5.d to the consolidated financial statements)

Description of risk	How our audit addressed this risk
As part of its trading activities, BNP Paribas holds financial instruments (assets and liabilities) which are recognised in the balance sheet at market value. Market value is determined according to different approaches, depending on the type of instrument and its complexity: (i) using directly observable quoted prices (instruments classified in level 1 of the fair value hierarchy); (ii) using valuation models whose main inputs are observable (instruments classified in level 2); and (iii) using valuation models whose main inputs are unobservable (instruments classified in level 3). The valuations obtained may be subject to additional value adjustments to take into account certain specific trading, liquidity or counterparty risks. The techniques adopted by management to measure these instruments may therefore involve significant judgement as regards the models and data used. At 31 December 2019, financial instruments represented EUR 641 billion (of which EUR 11 billion for level 3 instruments) under assets and EUR 596 billion (of which EUR 28.1 billion for level 3 instruments) under liabilities. In light of the materiality of the outstandings and the judgement used to determine market value, we deemed the measurement of financial instruments to be a key audit matter, in particular the measurement of level 3 instruments given the use of unobservable inputs.	Assisted by our valuation experts, we verified that the key controls used by BNP Paribas with respect to the valuation of financial instruments function properly, in particular those relating to: ■ the approval and regular review by management of the risks of the valuation models; ■ the independent verification of the valuation inputs; ■ the determination of value adjustments. Based on a sample, our valuation experts: ■ analysed the relevance of the assumptions and inputs used; ■ analysed the results of the independent verification of the inputs by BNP Paribas; ■ performed independent counter valuations using our own models. We also analysed on a sample basis any differences between the valuations obtained and collateral calls with counterparties. In addition, we examined the disclosures in the notes to the consolidated financial statements with respect to the valuation of financial instruments.

Goodwill impairment

(See Notes 1.b.4 and 5.o to the consolidated financial statements)

Description of risk	How our audit addressed this risk
When recognising acquisitions, BNP Paribas records goodwill under assets, corresponding to the excess of the acquisition price of the shares over the fair value of identifiable assets acquired and liabilities assumed at the acquisition date. At 31 December 2019, goodwill amounted to EUR 7.8 billion. Goodwill is tested for impairment at least once a year or more frequently if there is an indication of impairment. Comparing the carrying amount of the cash-generating units to which goodwill is allocated with their recoverable amount is a key step in the process of determining if an impairment charge should be recorded. We deemed goodwill impairment to be a key audit matter because management is required to exercise judgement to measure the recoverable amount of the cash-generating units, which involves making assumptions as regards the future earnings of acquirees and the discount rates applied to projected cash flows.	Our audit approach consisted in assessing the procedures implemented within BNP Paribas to test goodwill for impairment as well as the controls designed to identify indications of goodwill impairment. Assisted by our valuation experts, our work on the goodwill balances at 31 December 2019 consisted primarily in: ■ analysing the methods adopted by BNP Paribas; ■ critically assessing the business plans approved by Executive Management to ensure the reasonableness of the future cash flow estimates set out therein (in particular when projections do not match past performance); ■ critically analysing the main assumptions and inputs used (growth rate, cost of capital and discount rate) with respect to available external information; ■ assessing the analyses of the sensitivity of estimates to key inputs (in particular when the recoverable amount approximates the carrying amount). Lastly, we verified the appropriateness of the disclosures in the notes to the consolidated financial statements with respect to the results of impairment and sensitivity tests.

Analysis of legal risk with respect to regulatory and administrative investigations and to class actions
(See Notes 1.l, 1.o, 3.h, 5.p and 8.b to the consolidated financial statements)

Description of risk	How our audit addressed this risk
In each of the countries where it is present, BNP Paribas is subject to the regulations applicable to the sectors in which it operates. If the Group does not comply with the applicable laws and regulations, it may be exposed to significant fines and other administrative and criminal sanctions. It may also incur losses as a result of private legal disputes in connection with or unrelated to these sanctions. Estimating provisions to cover the consequences of investigations into non-compliance with certain regulations requires judgement due to the difficulty in anticipating the outcome of regulatory procedures. Estimating provisions with respect to class actions or other private legal disputes also requires management to exercise judgement. In light of the increase in regulatory and administrative investigations and class actions brought against financial establishments in recent years and of the significant judgement exercised by management to estimate the amount of provisions recognised, we deemed this risk to be a key audit matter.	We familiarised ourselves with the procedure for identifying and assessing legal risk with respect to regulatory and administrative investigations and to class actions, in particular through quarterly interviews with BNP Paribas' legal functions. Our work consisted primarily in: ■ obtaining an understanding of the analyses prepared by the financial and legal departments at the end of each quarterly accounting period; ■ interviewing the specialised law firms with which BNP Paribas works when subject to legal disputes. We also examined the related disclosures provided in the notes to the consolidated financial statements.

General IT controls

Description of risk	How our audit addressed this risk
The reliability and security of IT systems plays a key role in the preparation of BNP Paribas' consolidated financial statements. We thus deemed the assessment of the general IT controls of the infrastructures and applications that contribute to the preparation of accounting and financial information to be a key audit matter. In particular, a system for controlling access rights to IT systems and authorisation levels based on employee profiles represents a key control for limiting the risk of inappropriate changes to application settings or underlying data.	For the main systems used to prepare accounting and financial information, assisted by our IT specialists, our work consisted primarily in: ■ obtaining an understanding of the systems, processes and controls which underpin accounting and financial data; ■ assessing the general IT controls (application and data access management, application changes/developments management and IT operations management) on key systems (in particular accounting, consolidation and automatic reconciliation applications); ■ examining the control for the authorisation of manual accounting entries; ■ performing additional audit procedures, where appropriate.

Technical reserves of insurance companies
(See Notes 1.f.3, 1.o and 5.j to the consolidated financial statements)

Description of risk	How our audit addressed this risk
At the year-end, a liability adequacy test is performed for BNP Paribas' insurance activities. The purpose of this test is to ensure that liabilities in respect of insurance contracts and investment contracts with discretionary profit-sharing are adequate in light of current estimates of the future cash flows to be generated by those contracts. If the test indicates that the carrying amount of insurance liabilities is inadequate in relation to the estimated future cash flows, the total amount of the potential losses is recognised in profit or loss. At 31 December 2019, total technical insurance reserves and other liabilities amounted to EUR 237 billion. The end-2019 test confirmed that the carrying amount of the reserves was sufficient. In the current low interest rate environment, we deemed the implementation of the liability adequacy test for the Savings business to be a key audit matter because it involves using actuarial models as well as modelling options and guarantees which are specific to BNP Paribas and requires management to exercise judgement to determine certain key assumptions (e.g., discount rate, return on assets, surrender rate and fees).	Based on a sample, we assessed the amount of net future cash flows used in the calculation, in particular by: ■ assessing the validity of the data on asset portfolios and contracts used as a starting point for the modelling exercise; ■ identifying the main changes made to the actuarial models, assessing the relevance of said changes and obtaining an understanding of their impact on the result of the test; ■ analysing differences in the model results between 2018 and 2019 using analyses prepared by BNP Paribas. We verified that the most material differences were justified by changes in the portfolio, the assumptions or the models. ■ examining the results of the sensitivity analyses performed by BNP Paribas, notably those concerning rate assumptions. In addition, we examined the disclosures in the notes to the consolidated financial statements with respect to insurance liabilities.

Specific verifications

As required by legal and regulatory provisions and in accordance with professional standards applicable in France, we have also verified the information pertaining to the Group presented in the Board of Directors' management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

We attest that the management report includes the consolidated non-financial information statement required under article L.225-102-1 of the French Commercial Code. However, in accordance with article L.823-10 of the French Commercial Code, we have not verified the fair presentation and consistency with the consolidated financial statements of the information given in that statement, which will be the subject of a report by an independent third party.

Report on other legal and regulatory requirements

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of BNP Paribas SA by the Annual General Meetings held on 23 May 2006 for Deloitte & Associés, 26 May 1994 for PricewaterhouseCoopers Audit and 23 May 2000 for Mazars.

At 31 December 2019, Deloitte & Associés, PricewaterhouseCoopers Audit and Mazars were in the fourteenth, the twenty-sixth and the twentieth consecutive year of their engagement, respectively.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for preparing consolidated financial statements giving a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and for implementing the internal control procedures it deems necessary for the preparation of consolidated financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Financial Statements Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements

Objective and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions taken by users on the basis of these consolidated financial statements.

As specified in article L.823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgement throughout the audit.

They also:

- identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the consolidated financial statements;
- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;
- evaluate the overall presentation of the consolidated financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The Statutory Auditors are responsible for the management, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed thereon.

Report to the Financial Statements Committee

We submit a report to the Financial Statements Committee which includes, in particular, a description of the scope of the audit and the audit programme implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Financial Statements Committee includes the risks of material misstatement that, in our professional judgement, were the most significant for the audit of the consolidated financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Financial Statements Committee with the declaration provided for in article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in articles L.822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Financial Statements Committee.

Paris La Défense, Neuilly-sur-Seine and Courbevoie, 3 March 2020

The Statutory Auditors

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
Laurence Dubois	Patrice Morot	Virginie Chauvin

5 RISKS AND CAPITAL ADEQUACY – PILLAR 3

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The purpose of Pillar 3 – market discipline is to complement the minimum capital requirements (Pillar 1) and the supervisory review process (Pillar 2) with a set of disclosures completing the usual financial disclosures.

This chapter presents the information relative to the BNP Paribas Group's risks and in this respect meets:

- the requirements of part 8 of Regulation (EU) No. 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms[(1)] set out in the various technical standards published by the European Commission and European Banking Authority guidelines aimed at improving the comparability of information published by the institutions;
- the accounting standards requirements relating to the nature and the extent of the risks. Some information required by accounting standards IFRS 7, IFRS 4 and IAS 1 is included in this chapter and covered by the opinion of the Statutory Auditors on the consolidated financial statements. This information is identified by the mention "[Audited]" and must be read as being part of the notes to the consolidated financial statements.

The Basel current measures (known as Basel 3), approved in November 2010, strengthen the ability of banks to withstand economic and financial shocks of all kinds by introducing a series of regulatory provisions. The content of this reform was transposed into European law in Directive 2013/36/EU (CRD 4) and Regulation (EU) No. 575/2013 of 26 June 2013 (CRR), supplemented in June 2019 by Directive (EU) No. 2019/878 (CRD 5) and Regulation (EU) No. 2019/876 (CRR 2).

The regulatory framework of Basel 3 had the following main impacts:

- **strengthened solvency:**

  The Basel 3 rules harmonise the definition of capital and strengthen the ability of financial institutions to absorb losses.

  A detailed description of the composition of regulatory capital is given under *Regulatory capital* in section 5.2.

  Rules on calculating risk-weighted assets were also revised to strengthen related capital requirements. These calculation rules are detailed by risk type in the corresponding sections.

  Strengthened solvency is implemented through the Single Supervisory Mechanism (SSM) overseen by the ECB and the application of the European Banking Authority (EBA) Supervisory Review and Evaluation Process (SREP) guidelines.

  The BNP Paribas Group, identified as a "financial conglomerate", is subject to additional supervision. As a financial conglomerate, the Group's own funds cover the capital requirements for banking activities as well as insurance activities (see *Capital adequacy and capital planning* in section 5.2).

- **introduction of a leverage ratio:**

  The leverage ratio acts primarily as a supplementary measure to the risk-based capital requirements (backstop principle). Banks are now required to publish their leverage ratios which will be subject to a minimum requirement from 28 June 2021.

  The Group's leverage ratio as at 31 December 2019 is presented in section 5.2 *Capital adequacy and capital planning*.

- **liquidity management:**

  The implementation of liquidity requirements with the introduction of a short-term liquidity ratio (Liquidity Coverage Ratio – LCR) and a long term liquidity ratio (Net Stable Funding Ratio – NSFR) is presented in section 5.8 *Liquidity risk*.

  The minimum liquidity coverage ratio has been set at 100% of total net cash outflows during the 30-day stress period.

  The NSFR, the one-year minimum liquidity coverage ratio will be applicable from 28 June 2021.

- **introduction of the new bank resolution scheme:**

  The new bank resolution scheme introduced on 1 January 2016 has been accompanied, since 27 June 2019, by a TLAC ("Total Loss Absorbing Capacity") minimum ratio applicable to global systemically important banks (G-SIBs).

  This requirement will be supplemented in Europe by the introduction of a MREL ("Minimum Requirement for own funds and Eligible Liabilities") ratio from 1 January 2022. (see *Capital adequacy and capital planning* in section 5.2).

Furthermore, on 7 December 2017, the Group of Governors and Heads of Supervision (GHOS) approved the reforms finalising the Basel 3 regulatory framework. They consist of a revision of the framework for credit risk, credit valuation adjustment (CVA) risk, and operational risk, as well as the introduction of a floor for the calculation of risk-weighted assets when an internal method is used. The Basel Committee plans an application as of 1 January 2022. To be applicable, these reforms must be transposed into European law.

In chapter 5, the figures shown may not appear to add up in certain columns and rows due to rounding.

5

(1) The disclosures required under article 450 concerning the Group's compensation policy are available in the Compensations of regulated employees section of the Investor Relations website: https://invest.bnpparibas.com/en/compensation-regulated-employees.

5.1 Annual risk survey

KEY FIGURES

REGULATORY RATIOS

TABLE 1: CAPITAL RATIOS

In millions of euros	31 December 2019	31 December 2018(*)
COMMON EQUITY TIER 1 (CET1) CAPITAL	**81,204**	**76,131**
TIER 1 CAPITAL	**89,962**	**84,773**
TOTAL CAPITAL	**103,716**	**97,096**
RISK-WEIGHTED ASSETS	**668,828**	**647,001**
RATIOS		
Common Equity Tier 1 (CET1) capital	12.1%	11.8%
Tier 1 capital	13.5%	13.1%
Total capital	15.5%	15.0%

(*) In accordance with grandfathered Additional Tier 1 and Tier 2 capital eligibility rules applicable as of 2019.

The Group's balance sheet is very solid. The CET1 ratio stands at 12.1% as at 31 December 2019, with an increase of 30 basis point compared to 31 December 2018. This is explained by:

- the 2019 net income excluding exceptional other non operating items, after taking into account a 50% dividend pay-out ratio (+60 bp);
- the impact of new IFRS 16 accounting standard (-10 bp);
- the increase in risk-weighted assets at constant change net of the impact of securitisation (-40 bp);
- the net impact of disposals and acquisition (SBI Life, deconsolidation of the residual stake in this subsidiary, Prime Brokerage) as well as the partial impairment of BancWest's goodwill (+20 bp);
- the other effects (including change effect) have a limited impact on the ratio.

The Group's CET1 of 12.1% is significantly above the requirement notified within the SREP (see Table 20: *Overall Capital requirements*).

TABLE 2: TLAC RATIO(*)

In millions of euros	31 December 2019
Regulatory total capital and eligible liabilities(**)	143,639
Risk-weighted assets	668,828
TLAC RATIO	**21.5%**
Effect of preferred senior debt eligible at issuer's discretion(***)	2.5%
TLAC RATIO AFTER EFFECT OF PREFERRED SENIOR DEBT ELIGIBLE AT ISSUER'S DISCRETION	**24.0%**

(*) See detail in section Capital adequacy and capital planning in section 5.2.
(**) In accordance with grandfathered Additional Tier 1 and Tier 2 capital eligibility rules applicable as of 2019.
(***) In accordance with Regulation (EU) No. 2019/876, article 72ter paragraphs 3 and 4, some preferred senior debt instruments (amounting to EUR 18,294 million at 31 December 2019) are eligible within the limit of 2.5% of risk-weighted assets (3.5% from 1 January 2022 , in accordance with article 494 of Regulation (EU) No. 2019/876).

At 31 December 2019, the minimum TLAC requirement for the Group stands at 20.17% of the risk-weighted assets. With a TLAC ratio at 21.5% at 31 December 2019, the Group is well above the requirement, without taking into account the preferred senior debt eligible within the limit of 2.5% of the risk-weighted assets. The TLAC ratio would stand at 24.0% if the Group included the senior preferred debt.

At 31 December 2019, TLAC ratio stands at 7.3% of the leverage ratio exposure (to be compared to a 6% requirement).

TABLE 3: LEVERAGE RATIO

	31 December 2019	31 December 2018
LEVERAGE RATIO(*)	**4.6%**	**4.5%**

(*) See detail in Capital adequacy and capital planning in section 5.2.

TABLE 4: LIQUIDITY COVERAGE RATIO (LCR)

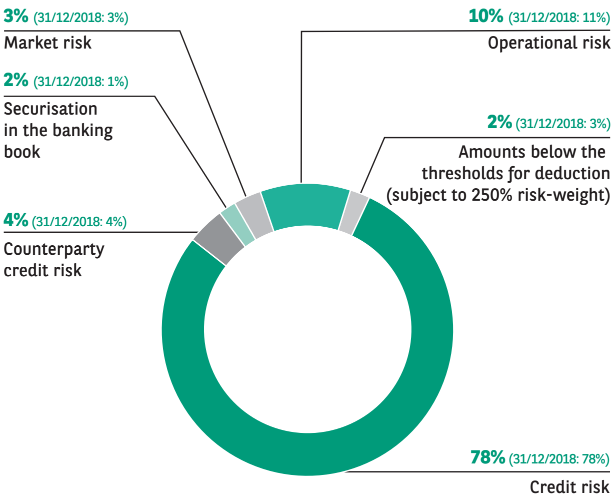
	31 December 2019	31 December 2018
LIQUIDITY COVERAGE RATIO (LCR AT YEAR-END)(*)	**125%**	**132%**

(*) See detail in Liquidity risk management and supervision in section 5.8.

The evolution of these ratios illustrates the Group's ability to continuously adapt to regulatory changes and the high quality of its balance sheet.

RISK-WEIGHTED ASSETS BY RISK TYPE AND BY BUSINESS LINE

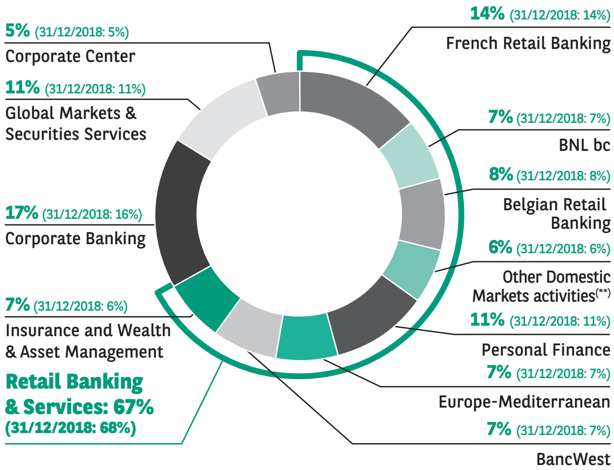
FIGURE 1: RISK-WEIGHTED ASSETS BY RISK TYPE(*)



(*) Breakdown at 31 December 2019.

Most of the Group's exposures are subject to credit risk. Market risk is limited to 3% of the Group's risk-weighted assets as at 31 December 2019.

FIGURE 2: RISK-WEIGHTED ASSETS BY BUSINESS LINE(*)



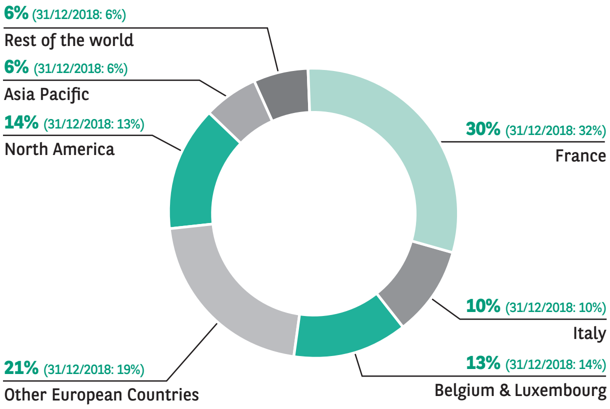
(*) Breakdown at 31 December 2019.

(**) Including Luxembourg.

As at 31 December 2019, the Group's risks are well spread and no single business makes up more than 17% of the Group's risk-weighted assets. Retail Banking & Services account for 67% of risk-weighted assets.

OTHER KEY FIGURES

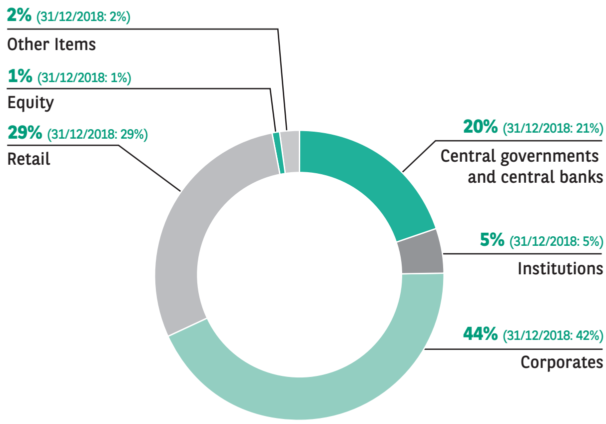
FIGURE 3: CREDIT RISK EXPOSURE BY GEOGRAPHIC REGION(*)



(*) Breakdown at 31 December 2019.

As at 31 December 2019, the Group's credit risk exposure was mainly concentrated in Europe (74%) and North America (14%). See the section *Credit risk diversification* in section 5.4 *Credit risk* for more details about the diversification of the Group's exposures.

FIGURE 4: CREDIT RISK EXPOSURE BY ASSET CLASS(*)



(*) Breakdown at 31 December 2019.

Credit exposure to sovereigns, financial institutions, corporates and specialised financing of Investment Grade counterparties represented 79% of IRBA credit risk exposure as at 31 December 2019, stable compared to 31 December 2018.

TABLE 5: DOUBTFUL LOANS ON GROSS OUTSTANDINGS RATIO

	31 December 2019	31 December 2018
DOUBTFUL LOANS(*)/LOANS(**)	**2.2%**	**2.6%**

(*) Impaired loans (stage 3) to customers and credit institutions, not netted of guarantees, including on-balance sheet and off-balance sheet and debt securities measured at amortised cost or at fair value through shareholders' equity (excluding insurance).

(**) Gross outstanding loans to customers and credit institutions, on-balance sheet and off-balance sheet, and including securities measured at amortised cost or at fair value through shareholders' equity (excluding insurance).

TABLE 6: STAGE 3 COVERAGE RATIO

In billions of euros	31 December 2019	31 December 2018
Stage 3 provisions	17.1	19.9
Doubtful loans(*)	23.1	26.2
STAGE 3 COVERAGE RATIO	**74.0%**	**76.2%**

(*) Impaired loans (stage 3) to customers and credit institutions, on-balance sheet and off-balance sheet, netted of guarantees received, including debt securities measured at amortised cost or at fair value through shareholders' equity (excluding insurance).

TABLE 7: COST OF RISK ON OUTSTANDINGS

In annualised basis point	31 December 2019	31 December 2018
COST OF RISK/CUSTOMER LOANS(*)	**39**	**35**

(*) Cost of risk divided by customer loans at the beginning of the period (see section 3.8 Alternative Performance Measures (APM) – article 223-1 of the AMF's General regulation in chapter 3).

TABLE 8: IMMEDIATELY AVAILABLE LIQUIDITY RESERVE

In billions of euros	31 December 2019	31 December 2018
IMMEDIATELY AVAILABLE LIQUIDITY RESERVE (COUNTERBALANCING CAPACITY)(*)	**309**	**308**

(*) Liquid market assets or eligible to central banks taking into account prudential standards, notably U.S. standards, minus intra-day payment systems needs.

TOP AND EMERGING RISKS

The identification and monitoring of top and emerging risks are central to BNP Paribas' approach to risk management.

These risks are identified, analysed and managed based on different work and analyses carried out by the RISK Function, the divisions and the businesses, and through several committees which give rise to actions and decisions:

- a close follow-up of macroeconomic and financial conditions with the objective of organising them into a hierarchy with regard to the consequences for BNP Paribas portfolio, and designing adverse scenarios. This close monitoring is delivered quarterly to the General Management as well as to the Internal Control, Risk Management and Compliance Committee (CCIRC) through a dashboard presented by RISK;
- a close monitoring of the risk profile in accordance with the directives and thresholds approved by the Board of directors;
- cross-functional policies on concentration or corporate social responsibility among others;
- market and liquidity risk decisions made by Group ALM Committee (or Group ALCo, see section *Governance* of section 5.3 *Risk management*) and the Capital Markets Risk Committee (CMRC);
- key decisions made by Committees with respect to specific transactions at the highest level;
- proposals for new activities or new products;
- portfolio and businesses reviews by Risk & Development Policy Committees, on topics selected by the Group's Executive Management through the Risk Forum for the upcoming year;
- proactive and forward-looking discussions on emerging risks and their impacts on the Bank's risk profile in the Risk Anticipation Committee;
- an analysis and a monitoring of changes to the regulatory framework and their consequences on the Bank's capital and liquidity management as well as on its activities.

TOP RISKS

A top risk is defined as having:

- the potential to have a material impact, across a business area or geographical area, on the financial results, reputation or sustainability of the Group;
- the potential of occurring in the near future.

The top risks to which the Group is exposed are described below.

Macroeconomic environment

Macroeconomic and market conditions affect the Bank's results. The nature of the Bank's business makes it particularly sensitive to macroeconomic and market conditions in Europe.

In 2019, the global economy slowed, with business growth falling from over 3.5% in 2018 to just over 3%, according to the IMF.

Growth has slowed in the United States and the euro zone. In the absence of any major change in oil prices, inflation remained moderate (almost 1.0% in the euro zone and just over 1.5% in the United States). These trends led the main central banks (U.S. Federal Reserve and the European Central Bank) to adopt a more accommodative stance (key interest rate cuts, balance sheet growth, etc.). Against this backdrop, long-term interest rates reached very low levels, with negative yields on ten-year sovereign bonds in Germany, France and Japan. These monetary policies helped to mitigate the deterioration in the economy compared with previous years.

China is involved in a process of rebalancing growth toward domestic demand, with an ongoing structural slowdown. Growth continued to slow across all emerging countries and fell below 4%, a level not witnessed since the early 2000s, (apart from during the 2008-2009 economic crisis). Growth is anticipated to return to above this threshold in 2020 due to positive funding effects with a more accommodating U.S. monetary policy and monetary easing expected in a number of emerging countries. This new context affects the banking sector's profitability and potentially reduces the effects of a new easing of monetary policy.

In this context, the following risk categories can be identified:

Risks of financial instability due to the conduct of monetary policies

In mature economies, the interest rate environment has changed drastically in the final quarters of 2019 in terms of central bank key interest rates, negative bond yields and flattened yield curves. Bank revenues were strongly impacted by a flat yield curve, negative central bank deposit rates and the difficulty of passing on negative rates to customers. Whilst several years ago, such developments would have been considered temporary and exceptional, the risk of this situation proving to be more long-term now seems increasing high.

In addition, a low (or zero) return on less risky assets and the ease of use of leverage may have two potential consequences:

- investment in more risky assets to generate higher returns (increased exposure to credit risk with downgrading ratings);
- the emergence of financial bubbles in certain asset categories such as real estate or the financial markets (stock market, private equity, bonds, etc.).

Some major financial players (insurance companies, pension funds, asset managers, etc.) have an increasingly systemic dimension and, in the event of market turbulence, could be brought to unwind large positions in a context of relatively weak market liquidity. The risk of a sharp increase in long-term interest rates and/or marked price corrections has greatly diminished since the reversal of monetary policies this year, but it cannot be excluded. In a number of asset markets, risk premiums are low compared with their historical average following a decade of accommodative monetary policies (lending to non-Investment Grade companies and countries, certain equity and bond market segments, etc.).

Systemic risks related to increased debt

In a number of economies, there are still marked imbalances in public finances. Although extremely low interest rates (supported by central banks' asset purchases) considerably reduced short-term threats by reducing debt servicing and gave governments more room for manoeuvre, risks still exist in the medium term. Euro zone countries are particularly affected by these risks for institutional reasons (budgetary constraints and fragmented bond market). In some economies, certain imbalances were also observed in the private sector (household debt in particular).

Furthermore, some emerging countries, including foreign currency debt and debt owed to foreign creditors, have also recorded a marked increase in their debt since 2008. Public and private debt could reach levels that are cause for concern. The deterioration in the debt profile may lead to downgrading by ratings agencies, followed by an increase in risk premiums and debt servicing, which could damage investor confidence and lead to capital outflow, heightening the negative effects listed above.

While the Group's exposure to emerging countries is limited, the vulnerability of these economies may generate disruptions in the global financial system that could affect the Group and potentially affect its results.

It should be noted that debt-related risk could materialise, not only in the event of a sharp rise in interest rates, but also with any negative growth shocks.

Risks of reduction of international trade from protectionist measures

The trade dispute between the United States and China worsened in 2019, with additional customs duties on imports imposed by the United States leading to retaliatory measures from China. In addition to the trade dispute, other clashes could occur, notably regarding exchange rates and technological leadership. A further dispute could arise between the United States and the European Union. In the longer term, the increase in protectionist policies threatens the smooth operation of supply chains and undermines continued globalisation.

Trade disputes are likely to slow global growth, reducing trade volumes, disrupting production chains and negatively impacting the confidence of economic agents and the financial markets.

Laws and regulations applicable to financial institutions

Recent and future changes in the laws and regulations applicable to financial institutions may have a significant impact on the Bank. Measures that were recently adopted or which are (or whose application measures are) still as projects, that have or are likely to have an impact on the Bank notably include:

- regulations governing capital: CRD 5/CRR 2 adopted in May 2019, the international standard for Total Loss Absorbing Capacity (TLAC) and the Bank's designation as a financial institution that is of systemic importance by the Financial Stability Board;
- the European Single Supervisory Mechanism and the Ordinance of 6 November 2014;
- the Directive of 16 April 2014 related to deposit guarantee systems and its delegated and implementing acts, the Directive of 15 May 2014 establishing a bank recovery and resolution framework, the Single Resolution Mechanism establishing the Single Resolution Council and the Single Resolution Fund;
- the Final Rule by the U.S. Federal Reserve imposing tighter prudential rules on the U.S. transactions of large foreign banks, notably the obligation to create a separate intermediary holding company in the U.S. (capitalised and subject to regulation) to hold their U.S. subsidiaries;

- the new rules for the regulation of over-the-counter derivative activities pursuant to Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, notably margin requirements for non-cleared derivative products and the security derivatives traded by swap dealers, major swap participants, security-based swap dealers and major security-based swap participants, and the rules of the US Securities and Exchange Commission which require the registration of banks and major swap participants active on derivatives markets as well as transparency and reporting on derivative transactions;
- the new MiFID 2 and MiFIR, and European regulations governing the clearing of certain over-the-counter derivative products by centralised counterparties and the disclosure of securities financing transactions to centralised bodies;
- the General Data Protection Regulation (GDPR), which came into force on 25 May 2018. This regulation aims to move the European data confidentiality environment forward and improve personal data protection within the European Union. Businesses run the risk of severe penalties if they do not comply with the standards set by the GDPR. This regulation applies to all banks and companies providing services to European citizens;
- the finalisation of Basel 3 published by the Basel committee in December 2017, introducing a revision to the measurement of credit risk, operational risk and CVA risk for the calculation of risk-weighted assets. These measures are due to come into force once they will be transposed into European law. The new Basel framework also provides for the gradual introduction of an overall floor which will be based on standardised approaches.

For a more detailed description, see risk factor *"6.1 Laws and regulations adopted in recent years, particularly in response to the global financial crisis, as well as new legislative proposals, may materially impact the BNP Paribas Group and the financial and economic environment in which it operates"*.

Moreover, in this stengthened regulatory context, the risk of non-compliance with existing laws and regulations, in particular those relating to the protection of the interests of customers and personal data, is a significant risk for the banking industry, potentially resulting in significant losses and fines[(1)]. In addition to its compliance system, which specifically covers this type of risk, the Group places the interest of its customers, and more broadly that of its stakeholders, at the heart of its values. Thus, the Code of conduct adopted by the Group in 2016 sets out detailed values and rules of conduct in this area.

Climate change-related risks

Climate change is a financial risk for the Group. Climate change-related risks may affect the Group, either directly on its own operations, or indirectly via its financing and investment activities. These risks mainly concern the physical risks related to the consequences of climate change and the "carbon" risks resulting from the transition to a low-carbon economy.

For more details, please see risk factor *"7.4. The BNP Paribas Group could experience business disruption and losses due to climate change risks such as transition risks, physical risks and liability risks"* and the measures taken and commitment made by the Group in this area in paragraph: Commitment 3: *Systematic integration and management of Environmental, Social and Governance risks (ESG)* of chapter 7.

Cyber security and technology risk

BNP Paribas' ability to do business is intrinsically tied to the fluidity of electronic transactions as well as the protection and security of information and technology assets.

The technological change is accelerating with the digital transformation and the resulting increase in the number of communications circuits, proliferation in data sources, growing process automation, and greater use of electronic banking transactions.

The progress and acceleration of the technological changes needed to respond to customer requirements are giving cybercriminals new options for altering, stealing and disclosing data. Attacks are more frequent, with a bigger reach and sophistication across all sectors, including financial services.

The outsourcing of a growing number of processes also exposes the Group to structural cybersecurity and technology risks leading to the appearance of potential attack vectors that cybercriminals can exploit.

Accordingly, the Group has reinforced the second line of defence within the RISK Function dedicated to managing technological and cyber security risks (see the paragraph *Cyber security and technology* in section 5.9 *Operational Risk*). Thus, operational standards are regularly adapted to support the Bank's digital evolution and innovation while managing existing and emerging threats (such as cyber-crime, espionage, etc.).

EMERGING RISKS

An emerging risk is defined as a new or evolving risk which potential impact could be material in the future but is currently not fully known or is difficult to quantify.

The Group identified emerging risks related to technological innovations, the evolving regulatory environment, as well as certain health, demographic and societal risks.

5

(1) *Risk factors: "6.2. The BNP Paribas Group may incur substantial fines and administrative and other criminal penalties for non-compliance with applicable laws and regulations and may also incur losses in related (or unrelated) litigation with private parties".*

Technological innovations

Technological developments related to the growing use of data in all production, marketing, and distribution processes, and to data sharing among economic players (producers, suppliers, and customers) will impact the economic models of the Group's clients and counterparties in a lasting way. These impacts, which are sometimes hard to assess in a context where new standards, economic balances, and regulatory entities are in the process of evolving and adapting, are being analysed internally by industry experts focused on the economic sectors most exposed to this evolution.

Furthermore, the Group's competitive environment is undergoing profound change, with the emergence of new fintech players, and the emergence of technological innovations which disrupt the traditional value chains of Group's businesses, and place the quality of the customer experience, and the use of new technologies to reduce the cost of low added-value operations, as their key competitive success factors. Maintenance of the Group's information systems must be done in this context of evolving value chains. The Group is deploying a proactive strategy in this area to adapt its activities to these major technological developments and promote some industrial cooperation with fintech players.

Evolving regulatory environments

Beyond the regulatory measures recently adopted or pending adoption, and already cited as top risks, the trend towards growing complexity and regional differences in the bank regulatory environment and related supervision is creating relative uncertainty over future developments, compliance costs, and proper performance risk concerning the various measures. The Group has established an active monitoring system for its regulatory environment, enabling it to minimise these risks.

Possible future divergences by type of regulated entity, for example, depending on their degree of innovation, may also introduce risk of a competitive nature.

Health risks

A viral or bacteriological infection that is potentially resistant to antibiotics, antiviral drugs or other treatments is an increasing possibility and could lead to preventive measures and disruptions to trade.

Such infections could cause infrastructure and production line failures, with consequences for all stakeholders.

Demographic risk

The ageing population is a major underlying trend in many countries. In the years and decades to come, this change significantly impact economic growth (this is already visible), as well as healthcare and retirement budgets, or saving and consumption behaviours.

Societal issues

In addition to responses designed to meet its customers' changing needs, the Group is seeks, on a more general basis, to responding to the expectations of the society in which it operates in terms of how it conducts its business, respect for human rights and environmental protection. The BNP Paribas Group Code of conduct defines standards of conduct in line with the values and missions determined by the Bank.

AREAS OF SPECIAL INTEREST IN 2019

United Kingdom

On 23 June 2016, the United Kingdom held a referendum which resulted in a majority vote to leave the European Union ("Brexit").

The withdrawal agreement was approved by the Parliament of the United Kingdom on 22 January 2020 and by the European Parliament on 29 January 2020. As a consequence, the United Kingdom formally left the European Union on 31 January 2020. The transition period during which the European Union and United Kingdom must agree the terms of their future relationship began on 1 February 2020 and is scheduled to end on 31 December 2020 barring any extension. During that period, the regulatory environment will not change.

The BNP Paribas Group operates in the United Kingdom through several branches and subsidiaries (see section 8.6 *I. Locations by country* in chapter 8 *General Information*). Its business, which it carries out mainly with corporations through its BNP Paribas SA branch in the United Kingdom, is of limited size for the scale of the Group and does not include a Retail Banking network in that country. At 31 December 2019, BNP Paribas generated 7.8% of its pre-tax operating income in the United Kingdom (see section 8.6 *II. Profit and loss account items and headcount by country* in chapter 8 *General Information*).

With respect to exposure to counterparties whose main business is in the United Kingdom, commercial commitments at 31 December 2019 represent 5.0% of the Group's total gross commitments, on- and off-balance sheet (see Table 27: *Credit risk exposure by geographic region*). Similarly, exposure to British sovereign risk is contained at 4.0% of the banking book's sovereign exposure (see Appendix 1 *Sovereign exposures*). The Bank's structural foreign exchange and interest rates position in pounds sterling is very moderate: outstanding loan amounts are low and funding in pounds sterling is largely matched.

The Group has prepared for Brexit with a view to ensuring the continuity of its activities. Its diversified business model in Europe in terms of both business lines and countries provides it with a high degree of flexibility to adapt to this new environment.

In practice, the Group has worked with the British and European regulators in order to ensure the continuity of its operational systems and has prepared various adaptation measures to enable clients, whether based in the United Kingdom or in Europe, to continue to benefit from the Group's broad range of banking products and services at the end of the transition period.

Hong Kong

The economic slowdown witnessed in Hong Kong since 2017 was exacerbated in 2019. Growth in GDP dropped below 1%, compared with 3% in 2018, due to the combined effect of the trade dispute between the United States and China which hindered its external trade, the economic slowdown in China which started before trade tensions heightened, and local protest movements which had a major impact on domestic demand and tourism-related business in the second half of 2019.

The Group has several branches and subsidiaires in Hong Kong (see section 8.6 *I. Locations by country* in chapter 8 *General Information)*. Its business, which it carries out mainly with corporations through its BNP Paribas SA branch in Hong Kong, is of limited size compared to the Group and does not include a Retail Banking network in that country. At 31 December 2019, BNP Paribas generated less than 1.6 of its revenues there (see section 8.6 *II. Profit and loss account items and headcount by country* in chapter 8 *General Information*).

Turkey

Local bond and foreign exchange markets were relatively stable in 2019, against a backdrop of gradual economic recovery. The geopolitical context and the heightened credit risk for companies were factors that impacted on this fragile recovery. The monetary easing introduced in summer 2019 should offset the effects of the drop in external demand, however, private sector debt is still amongst the highest of all emerging countries.

BNP Paribas' presence in Turkey is primarily through its TEB subsidiary (ranking No. 10 in retail banking in Turkey with a market share of approximately 3%). At 31 December 2019, the Group generated 2.6% of its pre-tax operating income in this country (see section 8.6 *II. Profit and loss account items and headcount by country* in chapter 8 *General information*). The entity TEB had a solvency ratio (Capital Adequacy Ratio - CAR) of 16.95% as at 31 December 2019, in excess of the regulatory requirements.

In 2019, TEB Group's balance sheet liquidity remained comfortable with a Liquidity Coverage Ratio (LCR) of 229% at 31 December 2019, versus 294% at 31 December 2018. With outstanding loans of TRY 67.5 billion and deposits of TRY 72.2 billion, TEB Group's financing structure is balanced.

With respect to exposure to counterparties whose main business is in Turkey, commercial commitments as at 31 December 2019 represent 1.5% of the Group's total gross commitments, on- and off-balance sheet (see Table 27: *Credit risk exposure by geographic region*). Exposure to Turkish sovereign risk is contained at 1.6% of the banking book's sovereign exposure and is essentially borne by TEB Group.

Others

Geopolitical tensions abated in Asia, on the Korean peninsula but remain high in certain areas, particularly in the Middle East, with the potential involvement of Western powers to varying degrees. Latin America has also been experiencing political tensions.

Although the possible consequences of such risks are hard to assess, the regional economies in question, and the global economy, could be impacted through different channels (confidence, trade ties and commodity prices).

The risks associated with changes in the macroeconomic and market environment are described in the following section *Risk factors*[1].

The analyses relating to the sectors (particularly shipping and leveraged finance) are set out in the *Industry diversification* paragraph in section 5.4.

The risk principles are presented in the Risk Appetite Statement approved by the Board of directors (see *Risk Appetite* in section 5.3).

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(1) *In particular the risk factor "5.3 Given the global scope of its activities, the Bank may be vulnerable to certain political, macroeconomic or financial risks in the countries and regions where it operates".*

RISK FACTORS

The main categories of risk inherent in the BNP Paribas Group's business are presented below. They may be measured through risk-weighted assets or other quantitative or qualitative indicia, to the extent risk-weighted assets are not relevant (for example, for liquidity and funding risk).

In billions of euros	RWA 31 December 2019	RWA 31 December 2018
Credit risk	524	504
Counterparty credit risk	30	27
Securitisation risk in the banking book	11	7
Operational risk	69	73
Market risk	19	20
Amounts below the thresholds for deduction (subject to 250% risk weight)	16	17
TOTAL	**669**	**647**

More generally, the risks to which the BNP Paribas Group is exposed may arise from a number of factors related, among others, to changes in its macroeconomic or regulatory environment or factors related to the implementation of its strategy and its business.

The risks specific to the BNP Paribas Group's business are presented below under seven main categories, pursuant to article 16 of Regulation (EU) 2017/1129, known as "Prospectus 3", dated 14 June 2017, of which the provisions relating to risk factors entered into force as of 21 July 2019: credit risk, counterparty risk and securitisation risk in the banking book; operational risk; market risk; liquidity and funding risk; risks related to the macroeconomic and market environment; regulatory risks; and risks related to the BNP Paribas Group's growth in its current environment.

The Group's risk management policies have been taken into account in assessing the materiality of these risks; in particular, risk-weighted assets factor in risk mitigation elements to the extent eligible in accordance with applicable banking regulations.

1. CREDIT RISK, COUNTERPARTY RISK AND SECURITISATION RISK IN THE BANKING BOOK

BNP Paribas Group's credit risk is defined as the probability of a borrower or counterparty defaulting on its obligations to the BNP Paribas Group. Probability of default along with the recovery rate of the loan or debt in the event of default are essential elements in assessing credit quality. In accordance with the European Banking Authority recommendations, this category of risk also includes risks on equity investments, as well as those related to insurance activities. As of 31 December 2019, the BNP Paribas Group's credit risk exposure broke down as follows: corporates (44%), retail customers (29%), central governments and central banks (19%), credit institutions (5%), other items (2%) and equities (1%). As at 31 December 2019, 30% of the BNP Paribas Group's credit exposure was comprised of exposures in France, 13% in Belgium and Luxembourg, 10% in Italy, 21% in other European countries, 14% in North America, 6% in Asia and 6% in the rest of the world. The BNP Paribas Group's risk-weighted assets subject to this type of risk amounted to EUR 524 billion at 31 December 2019, or 78% of the total risk-weighted assets of the BNP Paribas Group.

See Tables 24: *Credit risk exposure by asset class and approach* and 27: *Credit risk exposure by geographic region* in chapter 5.4 *Credit Risk*.

BNP Paribas Group's counterparty risk arises from its credit risk in the specific context of market transactions, investments, and/or settlements. BNP Paribas Group's exposure to counterparty risk, excluding CVA (Credit Valuation Adjustment) risk as at 31 December 2019, is comprised of: 41% to the corporate sector, 23% to governments and central banks, 12% to credit institutions and investment firms, and 24% to clearing houses. By product, BNP Paribas Group's exposure, excluding CVA risk, as at 31 December 2019 was comprised of: 54% in OTC derivatives, 30% in repurchase transactions and securities lending/borrowing, 14% in listed derivatives and 2% in contributions to the clearing houses' default funds. The amount of this risk varies over time, depending on fluctuations in market parameters affecting the potential future value of the covered transactions. In addition, CVA risk measures the risk of losses related to CVA volatility resulting from fluctuations in credit spreads associated with the counterparties to which the BNP Paribas Group is subject to risk. The risk-weighted assets subject to counterparty credit risk amounted to EUR 30 billion at 31 December 2019, representing 4% of the BNP Paribas Group's total risk-weighted assets.

See Tables 63: *Counterparty credit risk exposure at default by asset class (excl. CVA risk charge)*, 64: *Counterparty credit risk exposure at default by product (excl. CVA risk charge)* and 70: *CVA risk exposure at default and risk-weighted assets (EU CCR2)* in section 5.6 *Counterparty credit risk*.

Securitisation risk in the banking book: securitisation is a transaction or arrangement by which the credit risk associated with a liability or set of liabilities is subdivided into tranches. Any commitment made by the BNP Paribas Group under a securitisation structure (including derivatives and liquidity lines) is considered to be a securitisation. The bulk of the BNP Paribas Group's commitments are in the prudential banking portfolio. Securitized exposures are essentially those generated by the BNP Paribas Group. The securitisation positions held or acquired by the BNP Paribas Group may also be categorized by its role: of the positions as at 31 December 2019, BNP Paribas was originator of 49%, was sponsor of 36% and was investor of 15%. The risk-weighted assets subject to this type of risk amounted to EUR 11 billion at 31 December 2019 for the BNP Paribas Group, or 2% of the total risk-weighted assets of the BNP Paribas Group.

See Tables 52: *Securitised exposures and securitisation positions (held or acquired) by role* and 59: *Securitisation positions and risk-weighted assets by approach* in section 5.5 *Securitisation exposures in the banking book*.

1.1 A substantial increase in new provisions or a shortfall in the level of previously recorded provisions exposed to credit risk and counterparty risk could adversely affect the BNP Paribas Group's results of operations and financial condition

Credit risk and counterparty risk impact the BNP Paribas Group's consolidated financial statements when a customer or counterparty is unable to honour its obligations and when the book value of these obligations in the BNP Paribas Group's records is positive. The customer or counterparty may be a bank, a financial institution, an industrial or commercial enterprise, a government or a government entity, an investment fund, or a natural person. If the level of customer or counterparty defaults increases compared to recent historically low levels, the BNP Paribas Group may have to record significant charges and provisions for possible unrecoverable or doubtful debts, affecting its profitability.

As a result, in connection with its lending activities, the BNP Paribas Group regularly establishes provisions for loan losses, which are recorded on its income statement in the line item Cost of Risk. These provisions amounted to EUR 3.203 billion at 31 December 2019, representing 39 basis points of outstanding customer loans (compared with 35 basis points at 31 December 2018).

The BNP Paribas Group's overall level of provisions is based on its assessment of prior loss experience, the volume and type of lending being conducted, industry standards, past due loans, economic conditions and other factors related to the recoverability of various loans or statistical analysis based on scenarios applicable to asset classes.

Although the BNP Paribas Group seeks to establish an appropriate level of provisions, its lending businesses may have to increase their provisions for loan losses substantially in the future as a result of deteriorating economic conditions or other causes. Any significant increase in provisions for loan losses or a significant change in the BNP Paribas Group's estimate of the risk of loss inherent in its portfolio of non-impaired loans, as well as the occurrence of loan losses in excess of the related provisions, could have a material adverse effect on the BNP Paribas Group's results of operations and financial condition.

For reference, at 31 December 2019, the ratio of doubtful loans to total loans outstanding was 2.2% and the coverage ratio of these loans (net of guarantees received) by provisions was 74.0%, compared to 2.6% and 76.2%, respectively, as at 31 December 2018. These two ratios are defined in 5.1 *Key figures*.

While the BNP Paribas Group seeks to reduce its exposure to credit risk and counterparty risk by using risk mitigation techniques such as collateralization, obtaining guarantees, entering into credit derivatives and entering into netting agreements, it cannot be certain that these techniques will be effective to offset losses resulting from counterparty defaults that are covered by these techniques. Moreover, the BNP Paribas Group is also exposed to the risk of default by the party providing the credit risk coverage (such as a counterparty in a derivative or a loan insurance contract) or to the risk of loss of value of any collateral. In addition, only a portion of the BNP Paribas Group's overall credit risk and counterparty risk is covered by these techniques. Accordingly, the BNP Paribas Group has very significant exposure to these risks.

1.2 The soundness and conduct of other financial institutions and market participants could adversely affect the BNP Paribas Group

The BNP Paribas Group's ability to engage in financing, investment and derivative transactions could be adversely affected by the soundness of other financial institutions or market participants. Financial institutions are interrelated as a result of trading, clearing, counterparty, funding or other relationships. As a result, defaults of one or more States or financial institutions, or even rumours or questions about one or more financial institutions, or the financial services industry generally, may lead to market-wide liquidity problems and could lead to further losses or defaults. The BNP Paribas Group has exposure to many counterparties in the financial industry, directly and indirectly, including clearing houses, brokers and dealers, commercial banks, investment banks, mutual and alternative investment funds, and other institutional clients with which it regularly executes transactions. The BNP Paribas Group may also be exposed to risks related to the increasing involvement in the financial sector of players and the introduction of new types of transactions subject to little or no regulation (e.g. unregulated funds, trading venues or crowdfunding platforms). Credit and counterparty risks could be exacerbated if the collateral held by the BNP Paribas Group cannot be realized upon or is liquidated at prices not sufficient to recover the full amount of the loan or derivative exposure due to the BNP Paribas Group or in case of a failure of a significant financial market participant such as a central counterparty. It is worth noting in this respect that regulatory changes requiring mandatory clearing of standardised over-the-counter (OTC) derivatives through central counterparties have resulted in an increase of the exposure of financial market participants to such central counterparties.

For reference, counterparty risk exposure related to financial institutions was EUR 20 billion at 31 December 2019, or 12% of the BNP Paribas Group's total counterparty risk exposure, and counterparty risk exposure related to clearing houses was EUR 40 billion, or 24% of the BNP Paribas Group's total counterparty risk exposure.

In addition, fraud or misconduct by financial market participants can have a material adverse effect on financial institutions due in particular to the interrelated nature of the financial markets. An example is the fraud perpetrated by Bernard Madoff that came to light in 2008, as a result of which numerous financial institutions globally, including the BNP Paribas Group, announced losses or exposure to losses in substantial amounts. The BNP Paribas Group remains the subject of various claims in connection with the Madoff matter; see note 8.b *Contingent liabilities: legal proceedings and arbitration* to its consolidated financial statements for the period ended 31 December 2019.

Losses resulting from the risks summarized above could materially and adversely affect the BNP Paribas Group's results of operations.

See Table 63: *Counterparty credit risk exposure at default by asset class (excl. CVA risk charge)* in section 5.6.

2. OPERATIONAL RISK

BNP Paribas Group's operational risk is the risk of loss resulting from failed or inadequate internal processes (particularly those involving personnel and information systems) or external events, whether deliberate, accidental or natural (floods, fires, earthquakes, terrorist attacks, etc.). BNP Paribas Group's operational risks cover fraud, human resources risks, legal and reputational risks, non-compliance risks, tax risks, information systems risks, risk of providing inadequate financial services (conduct risk), risk of failure of operational processes including credit processes, or from the use of a model (model risk), as well as potential financial consequences related to reputation risk management. From 2011-2019, BNP Paribas Group's main type of incidents involving operational risk were in "Clients, products and business practices", which represents 63% of the total financial impact, largely as a result of the BNP Paribas Group's agreement with U.S. authorities regarding its review of certain dollar transactions concluded in June 2014. The next largest category of incident for the BNP Paribas Group in operational risk was in "Execution, delivery and process management", accounting for 17% of the financial impact. Between 2011-2019, other types of risk in operational risk consisted of external fraud (13%), business disruption and systems failure (3%), employment practices and workplace safety (2%), internal fraud (1%) and damage to physical assets (1%).

The risk-weighted assets subject to this type of risk amounted to EUR 69 billion at 31 December 2019, or 10% of the total risk-weighted assets of the BNP Paribas Group.

See Figure 14: *Operational losses – Breakdown by event type (average 2011-2019)* in chapter 5.9 *Operational risk*.

2.1 The BNP Paribas Group's risk management policies, procedures and methods may leave it exposed to unidentified or unanticipated risks, which could lead to material losses

The BNP Paribas Group has devoted significant resources to developing its risk management policies, procedures and assessment methods and intends to continue to do so in the future. Nonetheless, the BNP Paribas Group's risk management techniques and strategies may not be fully effective in mitigating its risk exposure in all economic and market environments or against all types of risk, particularly risks that the BNP Paribas Group may have failed to identify or anticipate. The BNP Paribas Group's ability to assess the creditworthiness of its customers or to estimate the values of its assets may be impaired if, as a result of market turmoil such as that experienced in recent years, the models and approaches it uses become less predictive of future behaviour, valuations, assumptions or estimates. Some of the BNP Paribas Group's qualitative tools and metrics for managing risk are based on its use of observed historical market behaviour. The BNP Paribas Group applies statistical and other tools to these observations to arrive at quantifications of its risk exposures. The process the BNP Paribas Group uses to estimate losses inherent in its credit exposure or estimate the value of certain assets requires difficult, subjective, and complex judgments, including forecasts of economic conditions and how these economic predictions might impair the ability of its borrowers to repay their loans or impact the value of assets, which may, during periods of market disruption, be incapable of accurate estimation and, in turn, impact the reliability of the process. These tools and metrics may fail to predict future risk exposures, e.g. if the BNP Paribas Group does not anticipate or correctly evaluate certain factors in its statistical models, or upon the occurrence of an event deemed extremely unlikely by the tools and metrics. This would limit the BNP Paribas Group's ability to manage its risks. The BNP Paribas Group's losses could therefore be significantly greater than the historical measures indicate. In addition, the BNP Paribas Group's quantified modelling does not take all risks into account. Its more qualitative approach to managing certain risks could prove insufficient, exposing it to material unanticipated losses.

2.2 An interruption in or a breach of the BNP Paribas Group's information systems may cause substantial losses of client or customer information, damage to the BNP Paribas Group's reputation and result in financial losses

As with most other banks, the BNP Paribas Group relies heavily on communications and information systems to conduct its business. This dependency has increased with the spread of mobile and online banking services, and the development of cloud computing. Any failure or interruption or breach in security of these systems could result in failures or interruptions in the BNP Paribas Group's customer relationship management, general ledger, deposit, servicing and/or loan organization systems or could cause the BNP Paribas Group to incur significant costs in recovering and verifying lost data. The BNP Paribas Group cannot provide assurances that such failures or interruptions will not occur or, if they do occur, that they will be adequately addressed.

In addition, the BNP Paribas Group is subject to cybersecurity risk, or risk caused by a malicious and/or fraudulent act, committed virtually, with the intention of manipulating information (confidential data, bank/insurance, technical or strategic), processes and users, in order to cause material losses to the BNP Paribas Group's subsidiaries, employees, partners and clients. An increasing number of companies (including financial institutions) have in recent years experienced intrusion attempts or even breaches of their information technology security, some of which have involved sophisticated and highly targeted attacks on their computer networks. Because the techniques used to obtain unauthorized access, disable or degrade service, steal confidential data or sabotage information systems have become more sophisticated, change frequently and often are not recognized until launched against a target, the BNP Paribas Group and its third-party service providers may be unable to anticipate these techniques or to implement in a timely manner effective and efficient countermeasures.

Any failures of or interruptions in the BNP Paribas Group's information systems or those of its providers and any subsequent disclosure of confidential information related to any client, counterpart or employee of the BNP Paribas Group (or any other person) or any intrusion or attack against its communication system could cause significant losses and have an adverse effect on the BNP Paribas Group's reputation, financial condition and results of operations.

Moreover, the BNP Paribas Group is exposed to the risk of operational failure or interruption of a clearing agent, foreign markets, clearing houses, custodian banks or any other financial intermediary or external service provider used by the BNP Paribas Group to execute or facilitate financial transactions. Due to its increased interaction with clients, the BNP Paribas Group is also exposed to the risk of operational malfunction of the latter's information systems. The BNP Paribas Group's communications and data systems and those of its clients, service providers and counterparties may also be subject to malfunctions or interruptions by as a result of cyber-crime or cyber-terrorism. The BNP Paribas Group cannot guarantee that these malfunctions or interruptions in its own systems or those of other parties will not occur or that in the event of a cyber-attack, these malfunctions or interruptions will be adequately resolved. These operational malfunctions or interruptions accounted for an average of 3% of operational risk losses over the 2011-2019 period.

See *Cyber security and technology* and Figure 14: *Operational losses - Breakdown by event type (average 2011-2019)* in chapter 5.9 *Operational risk*.

2.3 Reputational risk could weigh on the BNP Paribas Group's financial strength and diminish the confidence of clients and counterparties in it

Considering the highly competitive environment in the financial services industry, a reputation for financial strength and integrity is critical to the BNP Paribas Group's ability to attract and retain customers. The BNP Paribas Group's reputation could be harmed if it cannot adequately promote and market its products and services. The BNP Paribas Group's reputation could also be damaged if, as it increases its client base and the scale of its businesses, the BNP Paribas Group's comprehensive procedures and controls dealing with conflicts of interest fail, or appear to fail, to address them properly. At the same time, the BNP Paribas Group's reputation could be damaged by employee misconduct, fraud or misconduct by financial industry participants to which the BNP Paribas Group is exposed, a decline in, a restatement of, or corrections to its financial results, as well as any adverse legal or regulatory action, such as the settlement the BNP Paribas Group entered into with the U.S. authorities in 2014 for violations of U.S. laws and regulations regarding economic sanctions. The loss of business that could result from damage to the BNP Paribas Group's reputation could have an adverse effect on its results of operations and financial position.

3. MARKET RISK

The BNP Paribas Group's market risk is the risk of loss of value caused by an unfavourable trend in prices or market parameters. The parameters affecting the BNP Paribas Group's market risk include, but are not limited to, exchange rates, prices of securities and commodities (whether the price is directly quoted or obtained by reference to a comparable asset), the price of derivatives on an established market and all benchmarks that can be derived from market quotations such as interest rates, credit spreads, volatility or implicit correlations or other similar parameters.

BNP Paribas Group is exposed to market risk mainly through trading activities carried out by the business lines of its Corporate & Institutional Banking (CIB) operating division, primarily in Global Markets, which represented 12% of the BNP Paribas Group's revenue in 2019. BNP Paribas Group's trading activities are directly linked to economic relations with clients of these business lines, or indirectly as part of its market making activity.

In addition, the market risk relating to the BNP Paribas Group's banking activities covers its interest rate and foreign exchange rate risk in connection with its activities as a banking intermediary. The "operating" foreign exchange risk exposure relates to net earnings generated by activities conducted in currencies other than the functional currency of the entity concerned. The "structural" foreign exchange risk position of an entity relates to investments in currencies other than the functional currency. In measuring interest rate risk, the BNP Paribas Group defines the concepts of standard rate risk and structural rate risk as the following: the standard rate risk corresponds to the general case, namely when it is possible to define the most appropriate hedging strategy for a given transaction, and the structural rate risk is the interest rate risk for equity and non-interest-bearing current accounts.

BNP Paribas' market risk based on its activities is measured by Value at Risk (VaR), or the maximum potential loss over one year, at a 99.9% confidence level to calculate regulatory capital requirements, and various other market indicators (stressed VaR, Incremental Risk Charge, Comprehensive Risk Measure for credit correlation portfolio) as well as by stress tests and sensitivity analysis compared with market limits.

The risk-weighted assets subject to this type of risk amounted to EUR 19 billion at 31 December 2019, or 3% of the total risk-weighted assets of the BNP Paribas Group.

See Tables 75: *Market risk capital requirement and risk-weighted assets*, 76: *Market risk under the internal model approach* and 77: *Market risk under the standardised approach* in chapter 5.7 *Market risk*.

3.1 The BNP Paribas Group may incur significant losses on its trading and investment activities due to market fluctuations and volatility

The BNP Paribas Group maintains trading and investment positions in the debt, currency, commodity and equity markets, and in unlisted securities, real estate and other asset classes, including through derivative contracts. These positions could be adversely affected by extreme volatility in these markets, *i.e.* the degree to which prices fluctuate over a particular period in a particular market, regardless of market levels. Moreover, volatility trends that prove substantially different from the BNP Paribas Group's expectations may lead to losses relating to a broad range of other products that the BNP Paribas Group uses, including swaps, forward and future contracts, options and structured products.

To the extent that the BNP Paribas Group owns assets, or has net long positions, in any of those markets, a market downturn could result in losses from a decline in the value of its positions. Conversely, to the extent that the BNP Paribas Group has sold assets that it does not own, or has net short positions in any of those markets, a market upturn could, in spite of the existing limitation of risks and control systems, expose the BNP Paribas Group to potentially substantial losses as it attempts to cover its net short positions by acquiring assets in a rising market. The BNP Paribas Group may from time to time hold a long position in one asset and a short position in another, in order to hedge transactions with clients and/or from which it expects to gain based on changes in the relative value of the two assets. If, however, the relative value of the two assets changes in a direction or manner that the BNP Paribas Group did not anticipate or against which it is not hedged, it might realize a loss on those paired positions. Such losses, if significant, could adversely affect the BNP Paribas Group's results and financial condition. In addition, the BNP Paribas Group's hedging strategies may not be suitable for certain market conditions.

If any of the variety of instruments and strategies that the BNP Paribas Group uses to hedge its exposure to various types of risk in its businesses is not effective, the Group may incur losses. Many of its strategies are based on historical trading patterns and correlations. For example, if the BNP Paribas Group holds a long position in an asset, it may hedge that position by taking a short position in another asset where the short position has historically moved in a direction that would offset a change in the value of the long position. However, the hedge may only be partial, or the strategies used may not protect against all future risks or may not be fully effective in mitigating the BNP Paribas Group's risk exposure in all market environments or against all types of risk in the future. Unexpected market developments may also reduce the effectiveness of the BNP Paribas Group's hedging strategies, as occurred for example in late 2018 with the Group's index derivatives hedging in the United States. In addition, the manner in which gains and losses resulting from certain ineffective hedges are recorded may result in additional volatility in the BNP Paribas Group's reported earnings.

The BNP Paribas Group uses a "Value at Risk" (VaR) model to quantify its exposure to potential losses from market risks, and also performs stress testing with a view to quantifying its potential exposure in extreme scenarios (see *Market Risk Stress Testing Framework* in chapter 5.7 *Market risk*). However, these techniques rely on statistical methodologies based on historical observations, which may turn out to be unreliable predictors of future market conditions. Accordingly, the BNP Paribas Group's exposure to market risk in extreme scenarios could be greater than the exposures predicted by its quantification techniques.

The Global Markets business line in particular had EUR 18 billion in risk-weighted assets subject to market risk at 31 December 2019, or 3% of the total risk-weighted assets of the BNP Paribas Group.

3.2 The BNP Paribas Group may generate lower revenues from commission and fee-based businesses during market downturns

Commissions represented 21% of the BNP Paribas Group's total revenues in 2019. Financial and economic conditions affect the number and size of transactions for which the BNP Paribas Group provides securities underwriting, financial advisory and other Investment Banking services. These revenues, which include fees from these services, are directly related to the number and size of the transactions in which the BNP Paribas Group participates and can thus be significantly affected by economic or financial changes that are unfavourable to its Investment Banking business and clients. In addition, because the fees that the BNP Paribas Group charges for managing its clients' portfolios are in many cases based on the value or performance of those portfolios, a market downturn that reduces the value of its clients' portfolios or increases the amount of withdrawals would reduce the revenues it receives from its asset management, equity derivatives and Private Banking businesses. Independently of market changes, below-market performance by the BNP Paribas Group's mutual funds may result in increased withdrawals and reduced inflows, which would reduce the revenues the BNP Paribas Group receives from its asset management business.

3.3 Adjustments to the carrying value of the BNP Paribas Group's securities and derivatives portfolios and the BNP Paribas Group's own debt could have an adverse effect on its net income and shareholders' equity

The carrying value of the BNP Paribas Group's securities and derivatives portfolios and certain other assets, as well as its own debt, in its balance sheet is adjusted as of each financial statement date. As at 31 December 2019, on the assets side of the BNP Paribas Group's balance sheet, financial instruments at fair value through profit or loss, derivative financial instruments used for hedging purposes and financial assets at fair value through shareholders' equity amounted to EUR 576.1 billion, EUR 12.4 billion and EUR 52.7 billion respectively. In the liabilities column, financial instruments at fair value through profit or loss and derivative financial instruments used for hedging purposes amounted to EUR 582.2 billion and EUR 14.1 billion, respectively, at 31 December 2019. Most of the adjustments are made on the basis of changes in fair value of the BNP Paribas Group's assets or debt during an accounting period, with the changes recorded either in the income statement or directly in shareholders' equity. Changes that are recorded in the income statement, to the extent not offset by opposite changes in the value of other assets, affect the BNP Paribas Group's consolidated revenues and, as a result, its net income. All fair value adjustments affect shareholders' equity and, as a result, the BNP Paribas Group's capital adequacy ratios. The fact that fair value adjustments are recorded in one accounting period does not mean that further adjustments will not be needed in subsequent periods.

4. LIQUIDITY AND FUNDING RISK

Liquidity risk is the risk that the BNP Paribas Group will not be able to honour its commitments or unwind or offset a position due to market conditions or specific factors within a specified period of time and at a reasonable cost. It reflects the risk of not being able to cope with net cash outflows, including collateral requirements, over short-term to long-term horizons. The BNP Paribas Group's specific risk can be assessed through its short-term liquidity ratio (Liquidity Coverage Ratio – LCR), which analyses the hedging of net cash outflows during a thirty-day stress period. The monthly average in 2019 of the BNP Paribas Group's LCR was 123%, representing a liquidity surplus of EUR 58 billion compared to regulatory requirements. The liquidity reserve was EUR 309 billion at the end of 2019.

See Tables 92: *Breakdown of global liquidity reserve (counterbalancing capacity)* and 93: *Short-term liquidity ratio (LCR) – Itemised* in chapter 5.8 *Liquidity risk*.

4.1 The BNP Paribas Group's access to and cost of funding could be adversely affected by a resurgence of financial crises, worsening economic conditions, rating downgrades, increases in sovereign credit spreads or other factors

The financial crisis, the euro zone sovereign debt crisis as well as the general macroeconomic environment have at times adversely affected the availability and cost of funding for European banks in recent years. This was due to several factors, including a sharp increase in the perception of bank credit risk due to exposure to sovereign debt in particular, credit rating downgrades of sovereigns and of banks, and debt market speculation. Many European banks, including the BNP Paribas Group, at various points experienced restricted access to wholesale debt markets and to the interbank market, as well as a general increase in their cost of funding. Accordingly, reliance on direct borrowing from the European Central Bank ("ECB") at times increased substantially. If such adverse credit market conditions were to reappear in the event of prolonged stagnation of growth, deflation, resurgence of the financial crisis, another sovereign debt crisis or new forms of financial crises, factors relating to the financial industry in general or to the BNP Paribas Group in particular, the effect on the liquidity of the European financial sector in general and the BNP Paribas Group in particular could be materially adverse and have a negative impact on the BNP Paribas Group's results of operations and financial condition.

See *Wholesale funding and liquidity reserve monitoring indicators*, in chapter 5.8 in particular tables 88: *Breakdown of the wholesale funding by currency*; 89: *Breakdown of the Group's medium- and long-term (MLT) wholesale funding*; 90: *Trends in Group MLT wholesale funding*; and 91: *MLT secured wholesale funding*.

4.2 Protracted market declines can reduce the BNP Paribas Group's liquidity, making it harder to sell assets and possibly leading to material losses. Accordingly, the BNP Paribas Group must ensure that its assets and liabilities properly match in order to avoid exposure to losses

In some of the BNP Paribas Group's businesses, particularly Global Markets (which represented 12% of the BNP Paribas Group's revenue in 2019) and Asset/Liability Management, protracted market movements, particularly asset price declines, can reduce the level of activity in the market or reduce market liquidity. These developments can lead to material losses if the BNP Paribas Group cannot close out deteriorating positions in a timely way. This is particularly true for assets that are intrinsically illiquid. Assets that are not traded on stock exchanges or other public trading markets, such as certain derivative contracts between financial institutions, may have values that the BNP Paribas Group calculates using models rather than publicly-quoted prices. Monitoring the deterioration of prices of assets like these is difficult and could lead to significant unanticipated losses (see chapter 5.8, paragraph *Stress tests and liquidity reserve*).

The BNP Paribas Group is exposed to the risk that the maturity, interest rate or currencies of its assets might not match those of its liabilities. The timing of payments on certain of the BNP Paribas Group's assets is uncertain, and if the BNP Paribas Group receives lower revenues than expected at a given time, it might require additional market funding in order to meet its obligations on its liabilities. While the BNP Paribas Group imposes strict limits on the gaps between its assets and its liabilities as part of its risk management procedures, it cannot be certain that these limits will be fully effective to eliminate potential losses arising from asset and liability mismatches.

See paragraphs *Foreign exchange risk* and *Interest risk* in section 5.7 and paragraph *Business lines' internal monitoring indicators* in section 5.8, as well as Tables 94: *Contractual maturities of the prudential balance sheet*, 95: *Contractual maturities of capital instruments and medium- and long-term debt securities in the prudential perimeter* and 96: *Economic maturities of capital instruments (prudential perimeter).*

4.3 Any downgrade of the Group's companies' credit ratings could weigh heavily on the profitability of the Group

Credit ratings have a significant impact on the BNP Paribas Group's liquidity. On 5 April 2019, Standard & Poor's revised the long-term rating of BNP Paribas SA's deposits and senior preferred debt from A to A+, and confirmed its short-term rating as A-1, with a stable outlook. On 6 June 2019, Fitch revised its long-term deposits and senior preferred debt rating for the BNP Paribas SA from A+ to AA-, and raised its short-term rating from F1 to F1+, with a stable outlook. On 9 December 2019, Moody confirmed its long-term deposits and senior preferred debt rating as Aa3, and confirmed its short-term rating as P-1, with a stable outlook. On 12 July 2019, DBRS confirmed the BNP Paribas SA's senior preferred debt rating as AA(low), as well as its short-term rating as R-1(middle) with a stable outlook. A downgrade in the BNP Paribas Group companies' credit rating could affect the liquidity and competitive position of the Group. It could also increase the BNP Paribas Group's borrowing costs, limit access to the capital markets or trigger additional obligations under its covered bonds or under certain bilateral provisions in some trading, derivative or collateralized financing contacts.

In addition, the BNP Paribas Group's cost of obtaining long-term unsecured funding from market investors is also directly related to its credit spreads, which in turn depend to a certain extent on its credit ratings. Increases in credit spreads can significantly increase the BNP Paribas Group's cost of funding. Changes in credit spreads are continuous, market-driven, and subject at times to unpredictable and highly volatile movements. Credit spreads are also influenced by market perceptions of the BNP Paribas Group's creditworthiness. Furthermore, credit spreads may be influenced by movements in the cost to purchasers of credit default swaps referenced to the BNP Paribas Group's debt obligations, which are influenced both by the credit quality of those obligations, and by a number of market factors that are beyond the control of the BNP Paribas Group.

5. RISKS RELATED TO THE MACROECONOMIC AND MARKET ENVIRONMENT

5.1 Adverse economic and financial conditions have in the past had and may in the future have an impact on the BNP Paribas Group and the markets in which it operates

The BNP Paribas Group's business is sensitive to changes in the financial markets and more generally to economic conditions in France (31% of the Group's revenues at 31 December 2019), other countries in Europe (44% of the Group's revenues at 31 December 2019) and the rest of the world (25% of the Group's revenues at 31 December 2019). A deterioration in economic conditions in the markets where the BNP Paribas Group operates could have some or all of the following impacts:

- adverse economic conditions could affect the business and operations of the BNP Paribas Group's customers, reducing credit demand and trading volume and resulting in an increased rate of default on loans and other receivables;
- a decline in market prices of bonds, equities and commodities could impact many of the businesses of the BNP Paribas Group, including in particular trading, Investment Banking and asset management revenues;
- macroeconomic policies adopted in response to actual or anticipated economic conditions could have unintended effects, and are likely to impact market parameters such as interest rates and foreign exchange rates, which in turn could affect the BNP Paribas Group's businesses that are most exposed to market risk;
- perceived favourable economic conditions generally or in specific business sectors could result in asset price bubbles, which could in turn exacerbate the impact of corrections when conditions become less favourable;
- a significant economic disruption (such as the global financial crisis of 2008 or the European sovereign debt crisis of 2011) could have a severe impact on all of the BNP Paribas Group's activities, particularly if the disruption is characterized by an absence of market liquidity that makes it difficult to sell certain categories of assets at their estimated market value or at all;
- a significant deterioration of market and economic conditions resulting from, among other things, from adverse political and geopolitical events such as natural disasters, geopolitical tensions (in particular protectionist measures), emergence of health risks such as pandemics, acts of terrorism, societal unrest, cyber-attacks, military conflicts or threats thereof and related risks could affect the operating environment for the BNP Paribas Group episodically or for extended periods.

In 2020, European economies and financial markets will be particularly sensitive to a number of factors, including, for example, tensions around international trade (protectionist measures, such as customs duties, the "trade war" between the United States and China and tensions between the United States and Europe), geopolitical tensions (particularly in the Middle East and, more generally, between the United States and Iran), political risks directly affecting Europe (including the implementation of Brexit and the rise of populism), a persisting climate of sluggish economic growth, the volatility in commodity prices (itself affected by the above-mentioned factors) and, as discussed below, the evolution of monetary policy or the impact of health risks related to a pandemic such as the coronavirus.

More generally, increased volatility of financial markets could adversely affect the BNP Paribas Group's trading and investment positions in the debt, currency, commodity and equity markets, as well as its positions in other investments. For reference, Global Markets accounted for 12% of the BNP Paribas Group's revenues in 2019. Severe market disruptions and extreme market volatility have occurred in recent years and may occur again in the future, which could result in significant losses for the BNP Paribas Group. Such losses may extend to a broad range of trading and hedging products, including swaps, forward and future contracts, options and structured products. The volatility of financial markets makes it difficult to predict trends and implement effective trading strategies.

It is difficult to predict when economic or market downturns or other market disruptions will occur, and which markets will be most significantly impacted. If economic or market conditions in France or elsewhere in Europe, or Global Markets more generally, were to deteriorate or become more volatile, the BNP Paribas Group's operations could be disrupted, and its business, results of operations and financial condition could be adversely affected.

5.2 Significant interest rate changes could adversely affect the BNP Paribas Group's revenues or profitability. The prolonged low interest rate environment carries inherent systemic risks, which could impact the BNP Paribas Group's income or profitability, and any exit from such environment would also carry risks

The net interest income earned by the BNP Paribas Group during any given period significantly affects its overall revenues and profitability for that period. Interest rates are highly sensitive to many factors beyond the BNP Paribas Group's control, such as the rate of inflation, country-specific monetary policies and certain decisions concerning regulatory capital. Changes in market interest rates could affect the interest rates charged on interest-earning assets differently than the interest rates paid on interest-bearing liabilities. Any adverse change in the yield curve could cause a decline in net interest income generated by the BNP Paribas Group's lending activities. In addition, increases in the interest rates at which the BNP Paribas Group's short-term funding is available and maturity mismatches may adversely affect its profitability.

Since the 2008-2009 financial crisis, Global Markets have been characterized by an extended period of low interest rates. This low interest rate environment has weighed significantly on banks' profitability, including that of the BNP Paribas Group, for a number of years. The relative impact on banks depends, in particular, on the proportion of their revenues represented by net interest income; this proportion was 47% for the BNP Paribas Group in 2019 (see note 3.a *Net interest income* to the BNP Paribas Group's consolidated financial statements for the year ended 31 December 2019). The situation worsened in 2019, in particular with the emergence and increasing prevalence of loans at negative interest rates, including placements by European banks with the ECB. If the low, and even negative, interest rate environment continues, as a result, for example, of continued monetary loosening, low growth or other factors, the BNP Paribas Group's profitability could be impacted or even decline. In this respect, the ECB announced in 2019 – in the face of slower than anticipated growth – a status quo on its benchmark lending rates until at least the first half of 2020, new targeted longer-term financing operations (TLTRO) bearing, under certain conditions, negative rates, and, in September 2019, the resumption of its quantitative easing policy, which had been suspended a few months earlier. In addition, the persistently low interest rate environment blunts the effectiveness of monetary policies against declining growth or recessions.

During periods of low interest rates, interest rate spreads tend to tighten, and the BNP Paribas Group may be unable to lower interest rates on deposits sufficiently to offset reduced income from lending at lower interest rates. Net interest income amounted to EUR 21,062 million in 2018 and EUR 21,127 million in 2019, respectively (see note 3.a *Net interest income* to the BNP Paribas Group's unaudited consolidated financial statements for the year ended 31 December 2019). On an indicative basis, over one-, two- and three-year timeframes, the sensitivity of revenues at 31 December 2019 to a parallel, instantaneous and definitive increase in market rates of +50 basis points (+0.5%) across all currencies has an impact of -EUR 270 million, +EUR 216 million and +EUR 614 million, respectively, or -0.6%, 0.5% and 1.4% of the Group's net banking income (see paragraph *Sensitivity of revenues to global interest rate risk* in section 5.7). The negative interest rate environment in which banks are charged for cash deposited with central banks, whereas banks typically do not charge clients for deposits, weighs on banks' margins. In addition, the BNP Paribas Group has been facing and may continue to face an increase in early repayment and refinancing of mortgages and other fixed-rate consumer and corporate loans as clients take advantage of lower borrowing costs. This, along with the issuance of new loans at the low prevailing market interest rates, has resulted and may continue to result in a decrease in the average interest rate of the BNP Paribas Group's portfolio of loans thereby causing a decline in its net interest income from lending activities. Moreover, an environment of persistently low interest rates can also have the effect of flattening the yield curve in the market more generally, which could reduce the premium generated by the BNP Paribas Group from its funding activities. A flattening yield curve can also influence financial institutions to engage in riskier activities in an effort to earn the desired level of returns, which can increase overall market risk and volatility. Low interest rates may also affect the profitability and even the solvency of the insurance activities of French banks, including the BNP Paribas Group, particularly due to the prevalence in the market of life insurance contracts backed by euro-denominated funds, which may not be able to generate sufficient returns to be competitive with other investment products. Low interest rates may also adversely affect commissions charged by the BNP Paribas Group's asset management subsidiaries on money market and other fixed income products. A reduction in credit spreads and decline in Retail Banking income resulting from lower portfolio interest rates may adversely affect the profitability of the BNP Paribas Group's Retail Banking operations.

On the other hand, the end of a period of prolonged low interest rates, in particular due to tightening monetary policy (itself triggered in particular by increases in economic growth or in inflation at rates higher than expected by central banks) would also carry risks. If market interest rates were to rise, a portfolio featuring significant amounts of lower interest loans and fixed income assets would be expected to decline in value. If the BNP Paribas Group's hedging strategies are ineffective or provide only a partial hedge against such a change in value, the BNP Paribas Group could incur losses. Any sharper or more rapid than expected tightening could have a negative impact on the economic recovery. On the lending side, it could in particular cause stress in loan and bond portfolios, possibly leading to an increase in non-performing exposures and defaults. More generally, the ending of accommodative monetary policies (including liquidity infusions from central bank asset purchases) may lead to severe corrections in certain markets or asset classes (e.g. non-investment grade corporate and sovereign borrowers, certain sectors of equities and real estate) that particularly benefited (including from very low risk premiums as compared to historical averages) from the prolonged low interest rate and high liquidity environment, and such corrections could potentially be contagious to financial markets generally, including through substantially increased volatility.

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5.3 Given the global scope of its activities, the BNP Paribas Group may be vulnerable to risk in certain countries where it operates and may be vulnerable to political, macroeconomic or financial changes in the countries and regions where it operates

The BNP Paribas Group is subject to country risk, meaning the risk that economic, financial, political or social conditions in a given foreign country in which it operates could affect its business and results. The BNP Paribas Group monitors country risk and takes it into account in the fair value adjustments and cost of risk recorded in its financial statements. However, a significant change in political or macroeconomic environments may require it to record additional charges or to incur losses beyond the amounts previously written down in its financial statements. In addition, factors specific to a country or region in which the BNP Paribas Group operates could make it difficult for it to carry out its business and lead to losses or impairment of assets.

At 31 December 2019, the BNP Paribas Group's loan portfolio consisted of receivables from borrowers located in France (30%), Belgium and Luxembourg (13%), Italy (10%), other European countries (21%), North America (14%), Asia (6%) and the rest of the world (6%). Adverse conditions that particularly affect these countries and regions would have a particularly significant impact on the BNP Paribas Group. In addition, the BNP Paribas Group has significant exposures in countries outside the OECD, which are subject to risks that include political instability, unpredictable regulation and taxation, expropriation and other risks that are less present in more developed economies.

6. REGULATORY RISKS

6.1 Laws and regulations adopted in recent years, particularly in response to the global financial crisis, as well as new legislative proposals, may materially impact the BNP Paribas Group and the financial and economic environment in which it operates

Laws and regulations have been enacted in the past few years, in particular in France, Europe and the United States, with a view to introducing a number of changes, some permanent, in the financial environment. The impact of the measures has changed substantially the environment in which the BNP Paribas Group and other financial institutions operate.

The measures that have been adopted include:

- more stringent capital and liquidity requirements (particularly for global systemically important banks such as the BNP Paribas Group), as well as changes to the risk-weighting methodologies and the methods of using internal models that could lead to increased capital requirements;
- restrictions on certain types of activities considered as speculative undertaken by commercial banks that are prohibited or need to be ring-fenced in subsidiaries (particularly proprietary trading) and are subject to prudential requirements and autonomous funding;
- prohibitions or restrictions on certain types of financial products or activities;
- enhanced recovery and resolution regimes, in particular the Bank Recovery and Resolution Directive of 15 May 2014 (the "BRRD"), as amended from time to time, which strengthens powers to prevent and resolve banking crises in order to ensure that losses are borne largely by the creditors and shareholders of the banks and in order to keep the costs incurred by taxpayers to a minimum;
- the establishment of the national resolution funds by the BRRD and the creation of the Single Resolution Board (the SRB) by the European Parliament and Council of the European Union in a resolution dated 15 July 2014 (the SRM Regulation), as amended from time to time, which can initiate resolution proceedings for banking institutions such as the BNP Paribas Group, and the Single Resolution Fund (the SRF), the financing of which by the BNP Paribas Group (up to its annual contribution) can be significant;
- the establishment of national deposit guarantee schemes and a proposed European deposit guarantee scheme or deposit insurance which will gradually cover all or part of the guarantee schemes of participating countries;
- increased internal control and reporting requirements with respect to certain activities;
- greater powers granted to the relevant authorities to combat money laundering and terrorism financing;
- more stringent governance and conduct of business rules and restrictions and increased taxes on employee compensation over specified levels;
- measures to improve the transparency, efficiency and integrity of financial markets and in particular the regulation of high frequency trading, more extensive market abuse regulations, increased regulation of certain types of financial products including mandatory reporting of derivative and securities financing transactions, requirements either to mandatorily clear, or otherwise mitigate risks in relation to, over-the-counter derivative transactions (including through posting of collateral in respect of non-centrally cleared derivatives);
- the taxation of financial transactions;
- enhanced protection of personal data and cybersecurity requirements;
- enhanced disclosure requirements, for instance in the area of sustainable finance; and
- strengthening the powers of supervisory bodies, such as the French Prudential Supervision and Resolution Authority (the "ACPR") and the creation of new authorities, including the adoption of the Single Resolution Mechanism (the SRM) in October 2013, which placed the BNP Paribas Group under the direct supervision of the ECB as of November 2014.

These measures may have a significant adverse impact. For example, the introduction of a required contribution to the Single Resolution Fund resulted in a substantial additional expense for the BNP Paribas Group (the Group made a EUR 0.6 billion contribution to the Single Resolution Fund in 2019).

Measures relating to the banking sector could be further amended, expanded or strengthened. Moreover, additional measures could be adopted in other areas. It is impossible to predict what additional measures will be adopted and, given the complexity and continuing uncertainty of a certain number of these measures, to determine their impact on the BNP Paribas Group. The effect of these measures, whether already adopted or that may be adopted in the future, has been and could continue to be a decrease in the BNP Paribas Group's ability to allocate its capital and capital resources to financing, limit its ability to diversify risks, reduce the availability of certain financing and liquidity resources, increase the cost of financing, increase the cost of compliance, increase the cost or reduce the demand for the products and services offered by the BNP Paribas Group, require the BNP Paribas Group to proceed with internal reorganizations, structural changes or reallocations, affect the ability of the BNP Paribas Group to carry on certain activities or to attract and/or retain talent and, more generally, affect its competitiveness and profitability, which could have an impact on its profitability, financial condition and operating results. For example, the European Banking Authority estimated, in a report published on 5 August 2019, that the implementation of the final Basel III agreement adopted by the Group of Central Bank Governors and Heads of Supervision (GHOS) on 7 December 2017 may result, under conservative assumptions, in an increase of the Tier 1 minimum required capital amount by 24.4% with respect to the June 2018 baseline, which would cause, for the 189 banks in the sample, a shortfall in total capital of EUR 135.1 billion, of which EUR 91.1 billion common equity Tier 1.

The BNP Paribas Group is subject to extensive and evolving regulatory regimes in the jurisdictions in which it operates. The BNP Paribas Group faces the risk of changes in legislation or regulation in all of the countries in which it operates, including, but not limited to, the following:

- monetary, liquidity, interest rate and other policies of central banks and regulatory authorities;
- changes in government or regulatory policy that may significantly influence investor decisions, in particular in the markets in which the BNP Paribas Group operates;
- changes in regulatory requirements applicable to the financial industry, such as rules relating to applicable governance, remunerations, capital adequacy and liquidity frameworks, restrictions on activities considered as speculative and recovery and resolution frameworks;
- changes in securities regulations as well as in financial reporting, disclosure and market abuse regulations;
- changes in the regulation of certain types of transactions and investments, such as derivatives and securities financing transactions and money market funds;
- changes in the regulation of market infrastructures, such as trading venues, central counterparties, central securities depositories, and payment and settlement systems;
- changes in the regulation of payment services, crowdfunding and fintech;
- changes in the regulation of protection of personal data and cybersecurity;
- changes in tax legislation or the application thereof;
- changes in accounting norms;
- changes in rules and procedures relating to internal controls, risk management and compliance; and
- expropriation, nationalization, price controls, exchange controls, confiscation of assets and changes in legislation relating to foreign ownership.

These changes, the scope and implications of which are highly unpredictable, could substantially affect the BNP Paribas Group and have an adverse effect on its business, financial condition and results of operations. Some reforms not aimed specifically at financial institutions, such as measures relating to the funds industry or promoting technological innovation (such as open data projects), could facilitate the entry of new players in the financial services sector or otherwise affect the BNP Paribas Group's business model, competitiveness and profitability, which could in turn affect its financial condition and results of operations.

6.2 The BNP Paribas Group may incur substantial fines and other administrative and criminal penalties for non-compliance with applicable laws and regulations, and may also incur losses in related (or unrelated) litigation with private parties

The BNP Paribas Group is exposed to regulatory compliance risk, *i.e.* the failure to comply fully with the laws, regulations, codes of conduct, professional norms or recommendations applicable to the financial services industry. This risk is exacerbated by the adoption by different countries of multiple and occasionally diverging and even conflicting legal or regulatory requirements. Besides damage to the BNP Paribas Group's reputation and private rights of action (including class actions), non-compliance could lead to material legal proceedings, fines and expenses (including fines and expenses in excess of recorded provisions), public reprimand, enforced suspension of operations or, in extreme cases, withdrawal by the authorities of operating licenses. This risk is further exacerbated by continuously increasing regulatory scrutiny of financial institutions as well as substantial increases in the quantum of applicable fines and penalties. Moreover, litigation by private parties against financial institutions has substantially increased in recent years. Accordingly, the BNP Paribas Group faces significant legal risk in its operations, and the volume and amount of damages claimed in litigation, regulatory proceedings and other adversarial proceedings against financial services firms have substantially increased in recent years and may increase further. The BNP Paribas Group may record provisions in this respect as indicated in note 5.p to the consolidated financial statements for the year ended 31 December 2019 (*Provisions for contingencies and charges*).

In this respect, on 30 June 2014 the BNP Paribas Group entered into a series of agreements with, and was the subject of several orders issued by, U.S. federal and New York state government agencies and regulatory authorities in settlement of investigations into violations of U.S. laws and regulations regarding economic sanctions. The fines and penalties imposed on the BNP Paribas Group as part of this settlement included, among other things, the payment of monetary penalties amounting in the aggregate to USD 8.97 billion (EUR 6.6 billion) and guilty pleas by BNP Paribas SA, the parent company of the BNP Paribas Group, to charges of having violated U.S. federal criminal law and New York State criminal law. Following this settlement, the BNP Paribas Group remains subject to increased scrutiny by regulatory authorities (including via the presence of an independent consultant within the BNP Paribas Group) who are monitoring its compliance with a remediation plan agreed with them.

The BNP Paribas Group is currently involved in various litigations and investigations as summarized in note 8.b *Contingent liabilities: legal proceedings and arbitration* to its consolidated financial statements for the period ended 31 December 2019. It may become involved in further such matters at any point. No assurance can be given that an adverse outcome in one or more of such matters would not have a material adverse effect on the BNP Paribas Group's operating results for any particular period.

6.3 The BNP Paribas Group could experience an unfavorable change in circumstances, causing it to become subject to a resolution proceeding: BNP Paribas Group security holders could suffer losses as a result

The BRRD, SRM Regulation and the Ordinance of 20 August 2015, as amended from time to time, confer upon the ACPR or the SRB the power to commence resolution proceedings for a banking institution, such as the BNP Paribas Group, with a view to ensure the continuity of critical functions, to avoid the risks of contagion and to recapitalize or restore the viability of the institution. These powers are to be implemented so that, subject to certain exceptions, losses are borne first by shareholders, then by holders of additional capital instruments qualifying as Tier 1 and Tier 2 (such as subordinated bonds), then by the holders of non-preferred senior debt and finally by the holders of senior preferred debt, all in accordance with the order of their claims in normal insolvency proceedings. For reference, the BNP Paribas Group's medium- to long-term wholesale financing at 31 December 2019 consisted of the following: EUR 10 billion in hybrid Tier 1 debt, EUR 18 billion in Tier 2 subordinated debt, EUR 41 billion in senior unsecured non-preferred debt, EUR 81 billion in senior unsecured preferred debt and EUR 26 billion in senior secured debt.

Resolution authorities have broad powers to implement resolution measures with respect to institutions and groups subject to resolution proceedings, which may include (without limitation): the total or partial sale of the institution's business to a third party or a bridge institution, the separation of assets, the replacement or substitution of the institution as obligor in respect of debt instruments, the full or partial write-down of capital instruments, the dilution of capital instruments through the issuance of new equity, the full or partial write-down or conversion into equity of debt instruments, modifications to the terms of debt instruments (including altering the maturity and/or the amount of interest payable and/or imposing a temporary suspension on payments), discontinuing the listing and admission to trading of financial instruments, the dismissal of managers or the appointment of a special manager (*administrateur spécial*).

Certain powers, including the full or partial write-down of capital instruments, the dilution of capital instruments through the issuance of new equity, the full or partial write-down or conversion into equity of additional capital instruments qualifying as Tier 1 and Tier 2 (such as subordinated bonds), can also be exercised as a precautionary measure, outside of resolution proceedings and/or pursuant to the European Commission's State Aid framework if the institution requires exceptional public financial support.

The implementation of these tools and powers with respect to the BNP Paribas Group may result in significant structural changes to the BNP Paribas Group (including as a result of asset or business sales or the creation of bridge institutions) and in a partial or total write-down, modification or variation of claims of shareholders and creditors. Such powers may also result, after any transfer of all or part of the BNP Paribas Group's business or separation of any of its assets, in the holders of securities (even in the absence of any such write-down or conversion) being left as the creditors of the BNP Paribas Group whose remaining business or assets are insufficient to support the claims of all or any of the creditors of the Group.

See paragraph *Resolution documentation* in section 5.2 *Capital Management and capital adequacy.*

7. RISKS RELATED TO THE BNP PARIBAS GROUP'S GROWTH IN ITS CURRENT ENVIRONMENT

7.1 The BNP Paribas Group's failure to implement its strategic plan or to achieve its published financial objectives could affect the trading price of its securities

The BNP Paribas Group announced a strategic plan for the 2017-2020 period on 7 February 2017. This plan contemplates a number of initiatives, including the implementation of new customer pathways, the BNP Paribas Group's digital transformation, continuing to improve operating efficiency and various business development initiatives. The BNP Paribas Group closely monitors these initiatives. In its 2019 annual results release on 5 February 2020 the Group indicated the expected trends in 2020 for Domestic Markets, IFS and CIB in terms of revenues and jaws effect, as well as (on this basis) the return on tangible equity ROTE for the Group.

These financial objectives were established primarily for purposes of internal planning and allocation of resources, and are based on a number of assumptions with regard to business and economic conditions. The BNP Paribas Group's actual results could vary significantly from these objectives for a number of reasons, including the occurrence of one or more of the risk factors described elsewhere in this section. If the BNP Paribas Group does not achieve its objectives, its financial position and the trading price of its securities, as well as its financing costs, could be affected.

Additionally, the Group is pursuing an ambitious Corporate Social Responsibility (CSR) policy and is committed to making a positive impact on society with concrete achievements. At the end of 2019, BNP Paribas reaffirmed its ambition to be a global leader in sustainable finance. The Group is thus taking strong positions, as a founding member of the United

Nations Principles for Responsible Banking, which commits it to align its strategy with the Paris Agreement and the Sustainable Development Goals (SDGs). Its objective in 2020 is to provide EUR 185 billion in financing to sectors contributing to the SDGs. It is enhancing its support for the energy and environmental transition by deciding , for example, to reduce its outstanding loans to thermal coal companies to zero by 2030 in the European Union and 2040 in the rest of the world, and by raising its target for supporting renewable energy development by EUR 18 billion by 2021. These measures (and any future ones along similar lines) may in certain cases adversely affect the BNP Paribas Group's results in the relevant sectors.

7.2 The BNP Paribas Group may experience difficulties integrating acquired companies and may be unable to realize the benefits expected from its acquisitions

The BNP Paribas Group makes acquisitions on a regular basis. For example, the BNP Paribas Group's most recent major acquisition was of substantially all of the activities of Raiffeisen Bank Polska ("Core Bank") in Poland, which was completed on 31 October 2018; such activities were subsequently merged with BGZ BNP Paribas. Integrating acquired businesses is a long and complex process, which entailed, in 2019, the Group incurred EUR 311 million in restructuring costs, the integration of Raffeisen Bank Polska as well as the discontinuation or restructuring of certain businesses (in particular, BNP Paribas Suisse in 2019). Successful integration and the realization of synergies require, among other things, proper coordination of business development and marketing efforts, retention of key members of management, policies for effective recruitment and training as well as the ability to adapt information and computer systems. Any difficulties encountered in combining operations could result in higher integration costs and lower savings or revenues than expected. There will accordingly be uncertainty as to the extent to which anticipated synergies will be achieved and the timing of their realization. Moreover, the integration of the BNP Paribas Group's existing operations with those of the acquired operations could interfere with its respective businesses and divert management's attention from other aspects of the BNP Paribas Group's business, which could have a negative impact on the BNP Paribas Group's business and results. In some cases, moreover, disputes relating to acquisitions may have an adverse impact on the integration process or have other adverse consequences, including financial ones.

Although the BNP Paribas Group undertakes an in-depth analysis of the companies it plans to acquire, such analyses often cannot be complete or exhaustive. As a result, the BNP Paribas Group may increase its exposure to doubtful or troubled assets and incur greater risks as a result of its acquisitions, particularly in cases in which it was unable to conduct comprehensive due diligence prior to the acquisition.

See paragraph *Acquisitions and partnerships* in section 3.5 and section 8.5 *Investments.*

7.3 The BNP Paribas Group's current environment may be affected by the intense competition amongst banking and non-banking operators, which could adversely affect the BNP Paribas Group's revenues and profitability

Competition is intense in all of the BNP Paribas Group's primary business areas in France and the other countries in which it conducts a substantial portion of its business, including other European countries and the United States. Competition in the banking industry could intensify as a result of consolidation in the financial services area, as a result of the presence of new players in the payment and the financing services area or the development of crowdfunding platforms, as well as the continuing evolution of consumer habits in the banking sector. While the BNP Paribas Group has launched initiatives in these areas, such as the debut of Hello bank! and its acquisition of Nickel, competitors subject to less extensive regulatory requirements or to less strict capital requirements (*e.g*. debt funds, shadow banks), or benefiting from economies of scale, data synergies, technological innovation (*e.g*. internet and mobile operators, digital platforms, fintechs), or free access to customer financial data could be more competitive by offering lower prices and more innovative services to address the new needs of consumers. In addition, new payment systems and crypto-currencies, such as Bitcoin, and new technology that facilitate transaction processes, such as blockchain, have developed in recent years. While it is difficult to predict the effects of these emerging technologies as well as any applicable regulations, their use could nevertheless reduce the BNP Paribas Group's market share or secure investments that otherwise would have used technology used by more established financial institutions, such as the BNP Paribas Group. If the BNP Paribas Group is unable to respond to the competitive environment in France or in its other major markets by offering more attractive, innovative and profitable product and service solutions than those offered by current competitors or new entrants, it may lose market share in key areas of its business or incur losses on some or all of its activities. In addition, downturns in the economies of its principal markets could add to the competitive pressure, through, for example, increased price pressure and lower business volumes for the BNP Paribas Group and its competitors (the results of the BNP Paribas Group's various business lines in 2019 are described in the press release presenting the 2019 results, published on 5 February 2020). It is also possible that the imposition of more stringent requirements (particularly capital requirements and business restrictions) on large or systemically significant financial institutions, could lead to distortions in competition in a manner adverse to large private-sector institutions such as the BNP Paribas Group.

7.4 The BNP Paribas Group could experience business disruption and losses due to climate change risks such as transition risks, physical risks or liability risks

The BNP Paribas Group is exposed to risks related to climate change, either directly through its own operations or indirectly through its financing and investment activities. There are two main types of risks related to climate change: (i) transition risks, which result from changes in the behaviour of economic and financial actors in response to the implementation of energy policies or technological changes; (ii) physical risks, which result from the direct impact of climate change on people and property through extreme weather events or long-term risks such as rising water levels or increasing temperatures. In addition, liability risks may arise from both categories of risk. They correspond to the damages that a legal entity would have to pay if it were found to be responsible for global warming. BNP Paribas is progressively integrating the assessment of these risks into its risk management system. The Group monitors these risks in the conduct of its business, in the conduct of its counterparties' business, and in its investments on its own behalf and on behalf of third parties. In this respect, the specific credit policies and the General Credit Policy have been enhanced since 2012 and 2014, respectively, with the addition of relevant clauses in terms of social and environmental responsibility. In addition, sector-specific policies and policies excluding certain environmental, social and governance (ESG) sectors from financing have also been put in place. In 2019, as part of the fight against climate change, the BNP Paribas Group made new commitments to reduce its exposure to thermal coal to zero by 2030 in the European Union and by 2040 for the rest of the world. By the end of 2015, BNP Paribas had already significantly strengthened its criteria for financing and investing in the coal sector, and in 2017, it was the first bank to announce the cessation of its financing activities for companies that derive most of their revenues from non-conventional hydrocarbons, measures that remain to date among the most advanced in the sector. These decisions are also reflected in the energy mix that the BNP Paribas Group finances. The BNP Paribas Group also supports its clients, both individuals and businesses, in their transition to a low-carbon economy. The BNP Paribas Group also aims to reduce the environmental footprint of its own operations. Despite the actions taken by the BNP Paribas Group to monitor risks and combat climate change, physical, transition or liability risks related to climate change could disrupt business or lead to losses.

See Commitment 3: *Systematic integration and management of Environmental, Social and Governance risks (ESG)* in Chapter 7.2.

7.5 Changes in certain holdings in credit or financial institutions could have an impact on the BNP Paribas Group's financial position

Amounts below the thresholds for prudential capital deduction are assets subject to a risk-weight of 250%. These assets include: credit or financial institutions consolidated under the equity method within the prudential scope (excluding insurance); significant financial interest in credit or financial institutions in which the BNP Paribas Group holds a stake of more than 10%; and deferred tax assets that rely on future profitability and arise from temporary differences.

The risk-weighted assets subject to this type of risk amounted to EUR 16 billion at 31 December 2019, or 2% of the total risk-weighted assets of the BNP Paribas Group.

5.2 Capital management and capital adequacy

SCOPE OF APPLICATION

The prudential scope of application defined in Regulation (EU) No. 575/2013 on capital requirements is not the same as the accounting scope of consolidation whose composition concerns the application of IFRS as adopted by the European Union. The notes to the consolidated financial statements cover the accounting consolidation scope.

The consolidation principles and the scope of consolidation in accordance with the accounting consolidation method used are described respectively in notes 1.b and 8.j to the consolidated financial statements.

PRUDENTIAL SCOPE

In accordance with banking regulation, BNP Paribas Group has defined a prudential scope to monitor capital ratios calculated on a consolidated basis. Its specificities are as follows:

- insurance companies (primarily BNP Paribas Cardif and its subsidiaries) that are fully consolidated within the accounting scope are consolidated under the equity method in the prudential scope;
- unregulated entities of the real estate services (BNP Paribas Real Estate) and long-term vehicle leasing (Arval) businesses that are fully consolidated within the accounting scope are consolidated under the equity method within the prudential scope;
- jointly controlled entities are consolidated under the equity method in the accounting scope and under the proportional consolidation method in the prudential scope.

The differences between the accounting and prudential scopes of consolidation are summarised in the table below.

➤ TABLE 9: DIFFERENCES BETWEEN THE ACCOUNTING AND PRUDENTIAL SCOPES (EU LI3)

	31 December 2019					
		Method of regulatory consolidation				
Name of the entity	Method of accounting consolidation	Full consolidation	Proportional consolidation	Equity method	Neither consoli-dated nor deducted	Description of the entity
BNP Paribas Cardif and its subsidiaries(*)	Full consolidation			x		Insurance
BNPP SB Re	Full consolidation			x		Insurance
BNPP Vartry Reinsurance DAC	Full consolidation			x		Insurance
Decart Re Ltd	Full consolidation			x		Insurance
Darnell DAC	Full consolidation			x		Insurance
Greenval Insurance DAC	Full consolidation			x		Insurance
Le Sphinx Assurances Luxembourg SA	Full consolidation			x		Insurance
Greenstars BNPP	Full consolidation			x		Insurance
BNP Paribas Real Estate and its unregulated subsidiaries(*)	Full consolidation			x		Real estate services
Arval and its unregulated subsidiaries(*)	Full consolidation			x		Long-term vehicle leasing
Collective investment funds(**)	Full consolidation				x	Asset management
Bantas Nakit AS	Equity method		x			Retail banking
Banque Solféa	Equity method		x			Specialised loans
Bpost banque	Equity method		x			Retail banking
Copartis	Equity method		x			Retail banking
Euro Securities Partners	Equity method		x			Retail banking
Genius Auto Finance Co Ltd	Equity method		x			Specialised loans
FScholen	Equity method		x			Corporate and institutional banking
Fund Channel	Equity method		x			Asset management
Lyf SA	Equity method		x			Internet financial services
Lyf SAS	Equity method		x			Internet financial services
Partecis	Equity method		x			Retail banking
Services Logiciels d'Intégration Boursière	Equity method		x			Securities custody
Union de Creditos Inmobiliarios SA	Equity method		x			Specialised loans
United Partnership	Equity method		x			Specialised loans
Fonds Commun de Créances UCI et RMBS Prado	Equity method		x			Specialised loans

(*) BNP Paribas Cardif, BNP Paribas Real Estate and Arval subsidiaries are identified in note 8.j to the consolidated financial statements (footnote (2)).
(**) Collective investment funds are identified in note 8.j to the consolidated financial statements (footnote (4)).

The table below shows the differences between the accounting and prudential scopes of consolidation for each balance sheet item.

TABLE 10: CONSOLIDATED BALANCE SHEET TO PRUDENTIAL BALANCE SHEET RECONCILIATION (EU LI1-A)

	31 December 2019				
In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	Prudential scope	Reference to capital table (see Appendix 2)
ASSETS					
Cash and amounts due from central banks	155,135	-	265	155,400	
Financial instruments at fair value through profit or loss					
Securities	131,935	547	(141)	132,341	
of which own funds instruments in credit or financial institutions more than 10%-owned	*250*	*547*	*-*	*797*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*3,154*	*-*	*-*	*3,154*	*2*
Loans and repurchase agreements	196,927	1,495	(512)	197,910	
Derivative financial instruments	247,287	404	(170)	247,521	
Derivatives used for hedging purposes	12,452	(6)	5	12,451	
Financial assets at fair value through equity					
Debt securities	50,403	2,691	640	53,734	
of which own funds instruments in credit or financial institutions more than 10%-owned	*-*	*2,691*	*-*	*2,691*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*12*	*-*	*-*	*12*	*2*
Equity securities	2,266	-	-	2,266	
of which own funds instruments in credit or financial institutions more than 10%-owned	*388*	*-*	*-*	*388*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*837*	*-*	*-*	*837*	*2*
Financial assets at amortised cost					
Loans and advances to credit institutions	21,692	-	(318)	21,374	
of which own funds instruments in credit or financial institutions more than 10%-owned	*296*	*-*	*(65)*	*231*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*-*	*-*	*-*	*-*	*2*
Loans and advances to customers	805,777	3,500	21,171	830,448	
of which own funds instruments in credit or financial institutions more than 10%-owned	*65*	*339*	*(65)*	*339*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*334*	*-*	*-*	*334*	*2*
Debt securities	108,454	-	1,018	109,472	
of which own funds instruments in credit or financial institutions more than 10%-owned	*100*	*-*	*-*	*100*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*65*	*-*	*-*	*65*	*2*
Remeasurement adjustment on interest-rate risk hedged portfolios	4,303	-	48	4,351	
Financial investments of insurance activities	257,818	(257,818)	-	-	
Current and deferred tax assets	6,813	(8)	11	6,816	
Accrued income and other assets	113,535	(3,436)	(3,051)	107,048	
Equity-method investments	5,952	5,869	1,919	13,740	
of which investments in credit or financial institutions	*5,575*	*5,575*	*(615)*	*10,535*	*1*
of which goodwill	*332*	*280*	*(3)*	*609*	
Property, plant and equipment and investment property	32,295	(596)	(16,102)	15,597	
Intangible assets	3,852	(249)	(104)	3,499	3
of which intangible assets excluding mortgage servicing rights	*3,819*	*(249)*	*(104)*	*3,466*	
Goodwill	7,817	(279)	(869)	6,669	3
Non-current assets held for sale	-	-	-	-	
TOTAL ASSETS	**2,164,713**	**(247,886)**	**3,810**	**1,920,637**	

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	Prudential scope	Reference to capital table (see Appendix 2)
	31 December 2019				
LIABILITIES					
Deposits from central banks	2,985	-	-	2,985	
Financial instruments at fair value through profit or loss					
Securities	65,490	-	-	65,490	
Deposits and repurchase agreements	215,093	-	2	215,095	
Issued debt securities	63,758	(4,922)	(2)	58,834	
of which liabilities qualifying for Tier 1 capital	*205*	-	-	*205*	*4*
of which liabilities qualifying for Tier 2 capital	*118*	-	-	*118*	*5*
Derivative financial instruments	237,885	498	(169)	238,214	
Derivatives used for hedging purposes	14,116	(14)	175	14,277	
Financial liabilities at amortised cost					
Deposit from credit institutions	84,566	(5,945)	(114)	78,507	
Deposit from customers	834,667	1,007	6,493	842,167	
Debt securities	157,578	2,929	1,101	161,608	
Subordinated debt	20,003	(1,685)	1	18,319	
of which liabilities qualifying for Tier 1 capital	-	-	-	-	*4*
of which liabilities qualifying for Tier 2 capital	*17,353*	-	-	*17,353*	*5*
Remeasurement adjustment on interest-rate risk hedged portfolios	3,989	-	-	3,989	
Current and deferred tax liabilities	3,566	(219)	(245)	3,102	
Accrued expenses and other liabilities	102,749	(2,156)	(3,099)	97,494	
Technical reserves and other insurance liabilities	236,937	(236,937)	-	-	
Provisions for contingencies and charges	9,486	(321)	(330)	8,835	
TOTAL LIABILITIES	**2,052,868**	**(247,765)**	**3,813**	**1,808,916**	
EQUITY					
Share capital, additional paid-in capital and retained earnings	*97,135*	*5*	*(1)*	*97,139*	*6*
Net income for the period attributable to shareholders	*8,173*	-	-	*8,173*	*7*
Total capital, retained earnings and net income for the period attributable to shareholders	**105,308**	**5**	**(1)**	**105,312**	
Changes in assets and liabilities recognised directly in equity	*2,145*	*(6)*	-	*2,140*	
Shareholders' equity	**107,453**	**(1)**	**(1)**	**107,452**	
Minority interests	**4,392**	**(121)**	**(2)**	**4,269**	**8**
TOTAL CONSOLIDATED EQUITY	**111,845**	**(121)**	**(3)**	**111,721**	
TOTAL LIABILITIES AND EQUITY	**2,164,713**	**(247,886)**	**3,810**	**1,920,637**	

(*) Adjustment of jointly controlled entities under proportional consolidation for prudential scope, which are consolidated using the equity method within the accounting scope, and of the unregulated entities of BNP Paribas Real Estate and Arval consolidated using the equity method within the prudential scope which are fully consolidated within the accounting scope.

In millions of euros	31 December 2018				
	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	Prudential scope	Reference to capital table (Appendix 2)
ASSETS					
Cash and amounts due from central banks	185,119	-	232	185,351	
Financial instruments at fair value through profit or loss					
Securities	121,954	64	(32)	121,986	
of which own funds instruments in credit or financial institutions more than 10%-owned	*138*	*64*	*-*	*202*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*1,478*	*-*	*-*	*1,478*	*2*
Loans and repurchase agreements	183,716	2,378	(227)	185,867	
Derivative financial instruments	232,895	310	(57)	233,148	
Derivatives used for hedging purposes	9,810	(47)	-	9,763	
Financial assets at fair value through equity					
Debt securities	53,838	2,491	917	57,246	
of which own funds instruments in credit or financial institutions more than 10%-owned	*-*	*2,491*	*-*	*2,491*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*11*	*-*	*-*	*11*	*2*
Equity securities	2,151	-	-	2,151	
of which own funds instruments in credit or financial institutions more than 10%-owned	*439*	*-*	*-*	*439*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*986*	*-*	*-*	*986*	*2*
Financial assets at amortised cost					
Loans and advances to credit institutions	19,556	-	220	19,776	
of which own funds instruments in credit or financial institutions more than 10%-owned	*343*	*-*	*(40)*	*303*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*1*	*-*	*-*	*1*	*2*
Loans and advances to customers	765,871	4,209	5,531	775,611	
of which own funds instruments in credit or financial institutions more than 10%-owned	*33*	*339*	*(33)*	*339*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*26*	*-*	*-*	*26*	*2*
Debt securities	75,073	15	1,079	76,167	
of which own funds instruments in credit or financial institutions more than 10%-owned	*99*	*15*	*-*	*114*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*62*	*-*	*-*	*62*	*2*
Remeasurement adjustment on interest-rate risk hedged portfolios	2,787	-	11	2,798	
Financial investments of insurance activities	232,308	(232,308)	-	-	
Current and deferred tax assets	7,220	(46)	105	7,279	
Accrued income and other assets	103,346	(3,382)	336	100,300	
Equity-method investments	5,772	4,482	(115)	10,139	
of which investments in credit or financial institutions	*5,332*	*4,203*	*(84)*	*9,452*	*1*
of which goodwill	*367*	*279*	*(29)*	*618*	
Property, plant and equipment and investment property	26,652	(551)	73	26,174	
Intangible assets	3,783	(238)	18	3,563	3
of which intangible assets excluding mortgage servicing rights	*3,751*	*(239)*	*18*	*3,530*	
Goodwill	8,487	(280)	29	8,236	3
Non-current assets held for sale(**)	498	-	(498)	-	
TOTAL ASSETS	**2,040,836**	**(222,903)**	**7,622**	**1,825,555**	

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	Prudential scope	Reference to capital table (Appendix 2)
	31 December 2018				
LIABILITIES					
Deposits from central banks	1,354	-	-	1,354	
Financial instruments at fair value through profit or loss					
Securities	75,189	-	-	75,189	
Deposits and repurchase agreements	204,039	-	-	204,039	
Issued debt securities	54,908	(3,787)	-	51,121	
of which liabilities qualifying for Tier 1 capital	*205*	-	-	*205*	*4*
of which liabilities qualifying for Tier 2 capital	*116*	-	-	*116*	*5*
Derivative financial instruments	225,804	295	(59)	226,040	
Derivatives used for hedging purposes	11,677	(5)	66	11,738	
Financial liabilities at amortised cost					
Deposit from credit institutions	78,915	(5,938)	547	73,524	
Deposit from customers	796,548	1,033	5,456	803,037	
Debt securities	151,451	3,391	1,311	156,153	
Subordinated debt	17,627	(1,689)	28	15,966	
of which liabilities qualifying for Tier 1 capital	-	-	-	-	*4*
of which liabilities qualifying for Tier 2 capital	*15,454*	-	-	*15,454*	*5*
Remeasurement adjustment on interest-rate risk hedged portfolios	2,470	-	-	2,470	
Current and deferred tax liabilities	2,255	(125)	75	2,205	
Accrued expenses and other liabilities	89,562	(2,016)	194	87,740	
Technical reserves and other insurance liabilities	213,691	(213,691)	-	-	
Provisions for contingencies and charges	9,620	(264)	4	9,360	
TOTAL LIABILITIES	**1,935,110**	**(222,796)**	**7,622**	**1,719,936**	
EQUITY					
Share capital, additional paid-in capital and retained earnings	*93,431*	*16*	*4*	*93,451*	*6*
Net income for the period attributable to shareholders	*7,526*	-	*(4)*	*7,522*	*7*
Total capital, retained earnings and net income for the period attributable to shareholders	**100,957**	**16**	**-**	**100,973**	
Changes in assets and liabilities recognised directly in equity	*510*	*(7)*	-	*503*	
Shareholders' equity	**101,467**	**9**	**-**	**101,476**	
Minority interests	**4,259**	**(116)**	**-**	**4,143**	**8**
TOTAL CONSOLIDATED EQUITY	**105,726**	**(107)**	**-**	**105,619**	
TOTAL LIABILITIES AND EQUITY	**2,040,836**	**(222,903)**	**7,622**	**1,825,555**	

(*) Adjustment of jointly controlled entities under proportional consolidation for prudential scope, consolidated using the equity method in the accounting scope.
(**) The account "Non-current assets held for sales" is allocated to its original account in the prudential balance-sheet.

The following table shows the breakdown of the different categories of assets and liabilities recognised on the Bank's balance sheet by regulatory risk type. The sum of the amounts thus broken down is not necessarily equal to the net carrying values of the prudential scope, because some items may be subject to capital requirements for several types of risk.

TABLE 11: PRUDENTIAL BALANCE SHEET BY RISK TYPE (EU LI1-B)

	31 December 2019					
		Items subject to:				
In millions of euros	Net carrying values: prudential scope	credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	Not subject to capital requirements or deducted from capital
ASSETS						
Cash and amounts due from central banks	155,400	155,400	-	-	-	-
Financial instruments at fair value through profit or loss						
Securities	132,341	7,338	13,358	303	124,139	561
Loans and repurchase agreements	197,910	1,463	193,349	-	196,140	-
Derivative financial instruments	247,521	-	247,521	-	246,684	-
Derivatives used for hedging purposes	12,451	-	12,451	-	-	-
Financial assets at fair value through equity	56,000	51,981	320	1,075	-	2,944
Financial assets at amortised cost						
Loans and advances to credit institutions	21,374	19,373	1,697	-	-	329
Loans and advances to customers	830,448	775,365	15,291	37,328	-	2,438
Debt securities	109,472	95,172	1,408	12,049	-	2,251
Remeasurement adjustment on interest-rate risk hedged portfolios	4,351	-	-	-	-	4,351
Current and deferred tax assets	6,816	6,754	-	-	-	62
Accrued income and other assets	107,048	18,330	80,273	-	8,033	3,919
Equity-method investments	13,740	12,232	-	-	-	1,508
Property, plant and equipment and investment property	15,597	15,459	-	-	-	139
Intangible assets	3,499	34	-	-	-	3,465
Goodwill	6,669	-	-	-	-	6,669
TOTAL ASSETS	**1,920,637**	**1,158,901**	**565,668**	**50,755**	**574,996**	**28,636**

In millions of euros	31 December 2019					
	Net carrying values: prudential scope	Items subject to:				Not subject to capital requirements or deducted from capital
		credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	
LIABILITIES						
Deposits from central banks	2,985	-	-	-	-	2,985
Financial instruments at fair value through profit or loss						
Securities	65,490	-	-	-	65,470	21
Deposits and repurchase agreements	215,095	-	209,784	-	209,776	5,311
Issued debt securities	58,834	-	-	-	-	58,834
Derivative financial instruments	238,214	-	238,214	-	236,986	-
Derivatives used for hedging purposes	14,277	-	14,277	-	-	-
Financial liabilities at amortised cost						
Deposit from credit institutions	78,507	-	859	-	-	77,648
Deposit from customers	842,167	-	1,174	-	-	840,993
Debt securities	161,608	-	-	-	-	161,608
Subordinated debt	18,319	-	-	-	-	18,319
Remeasurement adjustment on interest-rate risk hedged portfolios	3,989	-	-	-	-	3,989
Current and deferred tax liabilities	3,102	-	-	-	-	3,102
Accrued expenses and other liabilities	97,494	0	64,000	-	3,115	32,738
Provisions for contingencies and charges	8,835	818	-	-	-	8,017
TOTAL LIABILITIES	**1,808,916**	**818**	**528,308**	**-**	**515,347**	**1,213,565**
TOTAL CONSOLIDATED EQUITY	**111,721**	**-**	**-**	**-**	**-**	**111,721**
TOTAL LIABILITIES AND EQUITY	**1,920,637**	**818**	**528,308**	**-**	**515,347**	**1,325,286**

						31 December 2018
	Net carrying values: prudential scope	Items subject to:				Not subject to capital requirements or deducted from capital
In millions of euros		credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	
ASSETS						
Cash and amounts due from central banks	185,351	185,351	-	-	-	-
Financial instruments at fair value through profit or loss						
Securities	121,986	6,751	6,838	531	114,543	161
Loans and repurchase agreements	185,867	1,184	181,971	-	184,363	-
Derivative financial instruments	233,148	-	233,148	-	232,227	0
Derivatives used for hedging purposes	9,763	-	9,763	-	-	-
Financial assets at fair value through equity	59,397	55,709	31	1,196	-	2,493
Financial assets at amortised cost						
Loans and advances to credit institutions	19,776	18,231	1,534	-	-	34
Loans and advances to customers	775,611	736,879	16,516	20,245	-	1,948
Debt securities	76,167	62,024	1,018	11,796	-	2,347
Remeasurement adjustment on interest-rate risk hedged portfolios	2,798	-	-	-	-	2,798
Current and deferred tax assets	7,279	6,820	-	-	-	460
Accrued income and other assets	100,300	20,655	70,355	-	10,499	3,614
Equity-method investments	10,139	9,522	-	-	-	618
Property, plant and equipment and investment property	26,174	26,066	-	-	-	108
Intangible assets	3,563	32	-	-	-	3,530
Goodwill	8,236	-	-	-	-	8,236
TOTAL ASSETS	**1,825,555**	**1,129,224**	**521,173**	**33,767**	**541,633**	**26,347**

In millions of euros	31 December 2018					
	Net carrying values: prudential scope	Items subject to:				Not subject to capital requirements or deducted from capital
		credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	
LIABILITIES						
Deposits from central banks	1,354	-	-	-	-	1,354
Financial instruments at fair value through profit or loss						
Securities	75,189	-	-	-	75,162	27
Deposits and repurchase agreements	204,039	-	196,366	-	196,365	7,671
Issued debt securities	51,121	-	-	-	-	51,124
Derivative financial instruments	226,040	-	226,040	-	224,839	-
Derivatives used for hedging purposes	11,738	-	11,738	-	-	-
Financial liabilities at amortised cost						
Deposit from credit institutions	73,524	-	681	-	-	72,843
Deposit from customers	803,037	-	553	-	-	802,485
Debt securities	156,153	-	-	-	-	156,153
Subordinated debt	15,966	-	-	-	-	15,966
Remeasurement adjustment on interest-rate risk hedged portfolios	2,470	-	-	-	-	2,470
Current and deferred tax liabilities	2,205	-	-	-	-	2,205
Accrued expenses and other liabilities	87,740	-	55,261	-	4,341	28,215
Provisions for contingencies and charges	9,360	998	-	-	-	8,363
TOTAL LIABILITIES	**1,719,936**	**998**	**490,639**	**-**	**500,707**	**1,148,873**
TOTAL CONSOLIDATED EQUITY	**105,619**	**-**	**-**	**-**	**-**	**105,619**
TOTAL LIABILITIES AND EQUITY	**1,825,555**	**998**	**490,639**	**-**	**500,707**	**1,254,493**

The following table shows the main differences between the amounts of accounting exposure on the balance sheet (see previous table) and the amounts of exposure used for regulatory purposes, based on the different types of risk, except market risk. Indeed, for the latter, the main regulatory measure used by the Group is Value at Risk (VaR), which reflects the sensitivity of the Bank's trading book to the different market parameters (see section 5.7, *Market risk exposure*). Therefore the VaR amount does not relate directly to the net book value of the assets and liabilities subject to market risk.

TABLE 12: RECONCILIATION BETWEEN NET CARRYING VALUES UNDER THE PRUDENTIAL SCOPE AND THE EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES (EU LI2)

	31 December 2019			
In millions of euros	Credit risk framework	Counterparty credit risk framework	Securitisation framework	Market risk framework
ASSETS NET CARRYING VALUE	**1,158,901**	**565,668**	**50,755**	**574,996**
Liabilities net carrying value		(528,308)		
Off-balance-sheet amounts net of impairment	417,997		10,489	
Credit risk impairment amounts	22,338		32	
Amounts below the thresholds for deduction (subject to 250% risk-weight)(*)	(6,549)			
Differences in valuations due to the use of internal models(**)		129,717		
Other adjustments	5,452			
EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES	**1,598,139**	**167,077**	**61,276**	

(*) Includes deferred tax assets depending on future profits and significant participations in financial sector entities, subject to 250% risk-weight.
(**) The main regulatory measure used by the Group for counterparty risk is the EEPE (Effective Expected Positive Exposure). The features of the valuation model are described in section 5.6 in the paragraph Counterparty risk calculation.

	31 December 2018			
In millions of euros	Credit risk framework	Counterparty credit risk framework	Securitisation framework	Market risk framework
ASSETS NET CARRYING VALUE	**1,129,224**	**521,173**	**33,767**	**541,633**
Liabilities net carrying value		(490,639)		
Off-balance-sheet amounts net of impairment	390,713		9,762	
Credit risk impairment amounts	25,490		78	
Amounts below the thresholds for deduction (subject to 250% risk-weight)(*)	(6,627)			
Differences in valuations due to the use of internal models(**)		114,825		
Other adjustments	4,720			
EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES	**1,543,521**	**145,360**	**43,608**	

(*) Includes deferred tax assets depending on future profits and significant participations in financial sector entities, subject to 250% risk-weight.
(**) The main regulatory measure used by the Group for counterparty risk is the EEPE (Effective Expected Positive Exposure). The features of the valuation model are described in section 5.6 in the paragraph Counterparty risk calculation.

The exposure amounts used for regulatory purposes are presented:

- in section 5.4 for credit risk;
- in section 5.5 for securitisation positions in the banking book;
- in section 5.6 for counterparty credit risk;
- in section 5.7 for market risk.

SIGNIFICANT SUBSIDIARIES

The risk-weighted assets of BNP Paribas' significant subgroups and subsidiaries are given in Appendix 4 to this chapter.

The following subgroups are considered significant, based on the criterion that their risk-weighted assets amount to more than 3% of the Group's total risk-weighted assets (excluding entities consolidated under the equity method) at 31 December 2019:

- BNP Paribas Fortis;
- Banca Nazionale del Lavoro (BNL);
- BNP Paribas USA, Inc[(1)];
- Bank of the West;
- BNP Paribas Personal Finance;
- BGL BNP Paribas.

The risk-weighted assets reported correspond to the sub-consolidation scope of each group. Thus, BGL BNP Paribas and Bank of the West subgroups are also included in BNP Paribas Fortis and BNP Paribas USA Inc. subgroups respectively.

REGULATORY CAPITAL

The BNP Paribas Group is required to comply with the French regulation that transposes European Directives on "Access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms" and "Financial Conglomerates" into French law.

In the various countries in which the Group operates, BNP Paribas also complies with specific regulatory ratios in line with procedures controlled by the relevant supervisory authorities. These ratios mainly address the issues of capital adequacy, risk concentration, liquidity and asset/liability mismatches.

As of 1 January 2014, Regulation (EU) No. 575/2013, establishing the methods for calculating the solvency ratio, defines it as the ratio between total regulatory capital and the sum of:

- the amount of risk-weighted assets for credit and counterparty risks, calculated using the standardised approach or the Internal Ratings Based Approach (IRBA) depending on the particular entity or the activity of the Group concerned;
- capital requirements for market risk, for credit valuation adjustment risk and for operational risk, multiplied by a factor of 12.5.

BREAKDOWN OF REGULATORY CAPITAL

Regulatory capital is divided into three categories (Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital), which consist of equity and debt instruments, to which regulatory adjustments have been made.

Common Equity Tier 1 capital

Common Equity Tier 1 capital instruments mainly comprise:

- the consolidated equity attributable to shareholders restated for the anticipated distribution of a dividend and Undated Super Subordinated Notes, which are ineligible for this category;
- minority interest reserves of regulated entities, adjusted for their capitalisation surplus. Minority interests of unregulated entities are excluded.

The main regulatory adjustments are as follows:

- gains and losses generated by cash flow hedges;
- adjustments to the value of instruments measured at fair value required by prudent valuation;
- goodwill and other intangible assets, net of deferred tax liabilities;
- net deferred tax assets that rely on future profitability and arising from tax loss carry-forwards;
- expected losses on equity exposures;
- share of expected losses on outstanding loans measured using the Internal Ratings Based Approach (IRBA) which is not covered by provisions and other value adjustments;
- securitisation tranches for which the Group has opted for the own funds deduction instead of a 1,250% weighting.

Treasury shares held or granted a buy back authorisation are deducted from this category.

(1) Since 1 July 2016, BNP Paribas USA, Inc. has been the Group's intermediate holding company for its U.S. subsidiaries.

TABLE 13: TRANSITION FROM CONSOLIDATED EQUITY TO COMMON EQUITY TIER 1 (CET1) CAPITAL

In millions of euros	31 December 2019	31 December 2018	
		Phased-in	Transitional arrangements(*)
Consolidated equity	**111,721**	**105,619**	-
Undated Super Subordinated Notes ineligible in CET1	(8,689)	(8,240)	-
Proposed distribution of dividends	(3,871)	(3,768)	-
Ineligible minority interests	(2,527)	(2,362)	-
Changes in the fair value of hedging instruments recognised directly in equity	(1,072)	(825)	-
Additional value adjustments linked to prudent valuation requirements	(1,396)	(892)	-
Goodwill and other intangible assets	(11,380)	(12,162)	-
Net deferred tax assets arising from tax loss carry-forwards	(430)	(527)	98
Negative amounts resulting from the calculation of expected losses	(551)	(242)	-
Other prudential adjustments	(599)	(372)	-
COMMON EQUITY TIER 1 (CET1) CAPITAL	**81,204**	**76,230**	**98**

(*) Amounts subject to pre-regulation treatment or prescribed residual amount of Regulation (EU) No. 575/2013.

Additional Tier 1 capital

Additional Tier 1 capital is mainly composed of subordinated debt instruments with the following characteristics:

- they are perpetual and include no redemption incentive;
- they are not held by the bank, its subsidiaries or any company in which the Group holds 20% or more of the capital;
- they have a capacity to absorb losses;
- they may include a buy back option, five years after the issue date at the earliest, exercisable at the issuer's discretion[1];
- remuneration arises from distributable elements that may be cancelled, with no requirements for the bank.

This category is also composed of non-eligible minority reserves in common equity within their limit of eligibility.

Authorisations to redeem Additional Tier 1 own capital instruments are deducted from this category.

Tier 2 capital

Tier 2 capital is comprised of subordinated debt with no buy back incentive, as well as non-eligible minority reserves in Tier 1 capital within their limit of eligibility. A prudential discount is applied to the subordinated debt with less than five years of residual maturity.

Prudential deductions from Tier 2 capital primarily concern:

- Tier 2 capital components in significant financial entities;
- Tier 2 own capital instruments buy back authorisations.

Transitional arrangements

Under Regulation (EU) No. 575/2013 (CRR), the calculation methods introduced by Basel 3 can be implemented gradually until 2022. Since 2019, items still subject to these transitional arrangements are subordinated debt issued prior to 31 December 2011, eligible under prior regulations but not eligible under Basel 3, to which a declining eligibility threshold applies. The impact of these arrangements is set out in lines 80 to 85 of Appendix 2: *Regulatory capital – Detail*.

Regulation (EU) No. 2019/876 (CRR 2), which came into force on 27 June 2019, introduces additional eligibility criteria for Tier 1 and 2 regulatory capital which supplement those provided for by Regulation (EU) No. 575/2013. Instruments that were previously eligible under CRR, although not fulfilling these additional requirements may, however, be recognised for a transitional period that may extend up to 2025. Details of the instruments affected by these transitional arrangements, as well as their period of eligibility, are available on the Group's Investor Relations website (see next page).

In addition, the Group does not apply the transitional arrangements provided to mitigate the impact of the introduction of IFRS 9 on capital, as defined under Regulation (EU) No. 2017/2395.

(1) Subject to authorisation by the supervisor.

Composition and evolution of regulatory capital

The detail of regulatory capital regulatory adjustments is presented in Appendix 2: *Regulatory capital – Detail*.

The table presenting the details of the debt instruments recognised as capital, as well as their characteristics, in accordance with the template (EU CCA) required by implementing Regulation No. 1423/2013, is available in the *BNP Paribas Debt* section of the Investor Relations website: https://invest.bnpparibas.com/en/debts/tier-1-hybrids-subordinated-debt/capital-instruments-main-features-template.

TABLE 14: REGULATORY CAPITAL

In millions of euros	31 December 2019	31 December 2018	
		Phased-in	Transitional arrangements(*)
Common Equity Tier 1 (CET1) capital: instruments and reserves			
Capital instruments and the related share premium accounts	27,133	27,133	-
of which ordinary shares	*27,133*	*27,133*	-
Retained earnings	62,139	58,968	-
Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	2,139	503	-
Minority interests (amount allowed in consolidated CET1)	1,742	1,781	-
Independently reviewed interim profits net of any foreseeable charge or dividend	3,888	3,387	-
COMMON EQUITY TIER 1 (CET1) CAPITAL BEFORE REGULATORY ADJUSTMENTS	**97,041**	**91,772**	**-**
Common Equity Tier 1 (CET1) capital: regulatory adjustments	(15,837)	(15,542)	98
COMMON EQUITY TIER 1 (CET1) CAPITAL	**81,204**	**76,230**	**98**
Additional Tier 1 (AT1) capital: instruments(**)	9,258	8,731	45
Additional Tier 1 (AT1) capital: regulatory adjustments	(500)	(44)	-
ADDITIONAL TIER 1 (AT1) CAPITAL(**)	**8,758**	**8,687**	**45**
TIER 1 CAPITAL (T1 = CET1 + AT1)(**)	**89,962**	**84,916**	**143**
Tier 2 (T2) capital: instruments and provisions(**)	17,351	15,511	(45)
Tier 2 (T2) capital: regulatory adjustments	(3,598)	(3,233)	-
TIER 2 (T2) CAPITAL(**)	**13,753**	**12,278**	**(45)**
TOTAL CAPITAL (TC = T1 + T2)(**)	**103,716**	**97,194**	**98**

(*) Amounts subject to pre-regulation treatment or prescribed residual amount of Regulation (EU) No. 575/2013.
(**) In accordance with grandfathered Additional Tier 1 and Tier 2 eligibility rules applicable as of 2019.

TABLE 15: CHANGE IN REGULATORY CAPITAL

In millions of euros	
COMMON EQUITY TIER 1 (CET1) CAPITAL	
31 December 2018	76,131
Common Equity Tier 1 capital: instruments and reserves	**5,269**
Capital instruments and the related share premium accounts	-
of which ordinary shares	-
Retained earnings	3,171
Accumulated other comprehensive income	1,636
Minority interests (amounts allowed in consolidated CET1)	(40)
Independently reviewed interim profits net of any foreseeable charge or dividend	501
Common Equity Tier 1 (CET1) capital: regulatory adjustments	**(196)**
of which additionnal value adjustments	*(504)*
of which intangible assets	*782*
of which net deferred tax assets depending on future profits excluding these arising from temporary differences	*194*
of which fair value reserves related to gains or losses on cash flow hedges	*(247)*
of which negative amounts resulting from the calculation of expected loss amounts	*(309)*
of which gains or losses on liabilities valued at fair value resulting from changes in own credit standing	*(25)*
of which securitisation positions deducted from own funds	*(41)*
of which regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment	*(120)*
of which other adjustments	*74*
31 December 2019	81,204
ADDITIONAL TIER 1 CAPITAL	
31 December 2018(*)	8,642
Additional Tier 1 (AT1) capital: instruments	**572**
Additional Tier 1 (AT1) capital: regulatory adjustments	**(456)**
Loans to credit or financial institutions more than 10%-owned	(450)
Others	(6)
31 December 2019	8,758
TIER 2 CAPITAL	
31 December 2018(*)	12,323
Tier 2 (T2) capital: instruments and provisions	**1,796**
Tier 2 (T2) capital: regulatory adjustments	**(365)**
Loans to credit or financial institutions more than 10%-owned	(140)
Others	(226)
31 December 2019	13,753

(*) In accordance with grandfathered Additional Tier 1 and Tier 2 eligibility rules applicable as of 2019.

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TABLE 16: CHANGE IN ELIGIBLE DEBT

In millions of euros	Tier 1	Tier 2
31 December 2018	**8,509**	**15,255**
New issues	1,511	1,870
Redemptions	(69)	(59)
Prudential discount	0	(152)
Others	(984)	184
31 December 2019	**8,967**	**17,100**

CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

The table below shows risk-weighted assets and capital requirement by risk type. Capital requirements make up 8% of risk-weighted assets.

TABLE 17: RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENT (EU OV1)

		RWAs		Capital requirements	
	In millions of euros	31 December 2019	31 December 2018	31 December 2019	
1	**Credit risk**	**524,231**	**503,851**	**41,939**	See section 5.4
2	of which standardised approach	210,490	220,383	16,839	
4	of which advanced IRB approach	259,552	242,323	20,764	
5	of which equity positions under the simple weighting method	54,189	41,146	4,335	
6	**Counterparty credit risk**	**29,520**	**26,634**	**2,362**	See section 5.6
7	of which mark-to-market method	2,682	2,552	215	
10	of which internal model method (IMM)	23,221	19,702	1,858	
11	of which CCP – default fund contributions	1,323	1,289	106	
12	of which CVA	2,294	3,090	184	
13	**Settlement risk**	**3**	**12**	**0**	
14	**Securitisation exposures in the banking book**	**10,510**	**7,040**	**841**	See section 5.5
14a	of which internal ratings based approach (SEC-IRBA)	4,324	-	346	
14b	of which standardised approach (SEC-SA)	1,257	-	101	
14c	of which external ratings based approach (SEC-ERBA)	177	-	14	
15	of which IRB approach	781	1,675	63	
16	of which IRB supervisory formula approach (SFA)	3,571	4,301	286	
18	of which standardised approach	400	1,064	32	
19	**Market risk**	**19,296**	**19,948**	**1,544**	See section 5.7
20	of which standardised approach	1,776	2,222	142	
21	of which internal model approach (IMA)	17,521	17,726	1,402	
23	**Operational risk**	**68,891**	**72,947**	**5,511**	See section 5.9
24	of which basic indicator approach	4,371	5,619	350	
25	of which standardised approach	10,243	10,393	819	
26	of which advanced measurement approach (AMA)	54,278	56,935	4,342	
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**16,376**	**16,569**	**1,310**	
29	**TOTAL**	**668,828**	**647,001**	**53,506**	

The Group's total risk-weighted assets amounted to EUR 668.8 billion at 31 December 2019 compared with EUR 647.0 billion at 31 December 2018. At 31 December 2019, risk-weighted assets calculated using the internal model represented 55% of the Group's risk-weighted assets.

The breakdown of risk-weighted assets by risk type is presented in the various appropriate sections.

Amounts below the thresholds for prudential capital deduction are assets weighted at 250% pursuant to article 48 of Regulation (EU) No. 575/2013. These include:

- credit or financial institutions consolidated under the equity method, except for insurance entities consolidated under the equity method in the prudential scope, which are weighted using the simple weighting method;
- significant financial interests in credit or financial institutions in which the Group holds a stake of more than 10%;
- deferred tax assets that rely on future profitability and arise from temporary differences.

Settlement risk is defined in article 378 of Regulation (EU) No. 575/2013 as the risk of loss of value related to a delay in the settlement of securities transactions. As at 31 December 2019, the risk-weighted assets with respect to this risk are insignificant for the Group at EUR 3 million.

RISK-WEIGHTED ASSETS MOVEMENTS IN 2019

The change in risk-weighted assets can be broken down into the following effects:

- asset size effect: impact stemming from the variation in exposures (EAD) and impact related to the efficient securitisation programmes initiated by the Group;
- asset quality effect: impact stemming from the change in risk parameters (Probability of Default, Loss Given Default for the internal ratings based approach, and risk weighting for the standardised approach, etc.);
- model update effect: impact stemming from changes in the use of internal models (introduction of a new model, deployment on a new exposure scope, annual recalibration or review of risk parameters, application of add-ons, etc.);
- methodology and policy effect: impact stemming from changes in methodology and the establishment of new regulatory requirements having an impact on the calculation of risk-weighted assets;
- acquisition and disposal effect: impact stemming from changes in the scope of consolidation;
- currency effect: impact stemming from fluctuations in foreign exchange rates on exposures.

➤ TABLE 18: RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER

RWAs *In millions of euros*	31 December 2018	Key driver							Total Variation	31 December 2019
		Asset size	Asset quality	Model updates	Methodology and policy	Acquisitions and disposals	Currency	Other		
Credit risk	503,851	27,869	(15,738)	4,397	3,361	(2,571)	3,127	(65)	20,380	524,231
Counterparty credit risk	26,634	3,666	(1,894)	1,524	-	53	(1)	(461)	2,886	29,520
Settlement risk	12	-	-	-	-	-	-	(9)	(9)	3
Banking book securitisation positions	7,040	3,571	(103)	-	-	15	164	(177)	3,470	10,510
Market risk	19,948	3,162	(1,531)	(2,398)	-	(411)	-	527	(652)	19,296
Operational risk	72,947	1,308	(1,423)	(190)	-	(3,750)	(1)	0	(4,056)	68,891
Amounts below the thresholds for deduction (subject to 250% risk weight)	16,569	742	-	-	170	(1,228)	0	123	(193)	16,376
TOTAL	**647,001**	**40,318**	**(20,689)**	**3,333**	**3,531**	**(7,893)**	**3,288**	**(63)**	**21,826**	**668,828**

Below are the main reasons behind the EUR 22 billion increase in risk-weighted assets in 2019:

- a EUR 40 billion increase related to the business activity characterised by the increase in credit risk net of the effect of efficient securitisations initiated by the Group (+EUR 28 billion overall);
- a EUR 21 billion improvement in asset quality primarily from credit risk with, in particular, an improvement in risk parameters;
- an increase of EUR 3 billion relating to the update of models;
- an increase of EUR 4 billion related to the adoption of the new accounting standard IFRS 16 from 1 January 2019;

- a decrease of EUR 8 billion related to scope effects, particularly following the change in consolidation methods for some Group's unregulated entities, which are now consolidated under the equity method within the prudential scope;
- an increase of EUR 3 billion due to currency effects, particularly with the appreciation of the U.S. dollar and pound sterling.

Comments on the main changes in 2019 for each type of risk are detailed in the various appropriate sections.

BREAKDOWN OF RISK-WEIGHTED ASSETS BY BUSINESS LINE

TABLE 19: RISK-WEIGHTED ASSETS BY RISK TYPE AND BUSINESS

	31 December 2019						
	Retail Banking & Services		Corporate & Institutional Banking				
RWAs *In millions of euros*	Domestic Markets	International Financial Services	Corporate Banking	Global Markets	Securities Services	Corporate Centre	Total
Credit risk	**202,639**	**190,938**	**98,619**	**7,106**	**2,261**	**22,668**	**524,231**
of which standardised approach	50,910	139,964	6,836	1,528	631	10,621	210,490
of which advanced IRB approach	142,169	19,095	90,682	4,425	1,527	1,655	259,552
of which equity positions under the simple weighting method	9,559	31,879	1,102	1,153	103	10,393	54,189
Counterparty credit risk	**2,626**	**575**	**425**	**24,221**	**1,553**	**121**	**29,520**
of which mark-to-market method	323	505	24	986	838	6	2,682
of which internal model method (IMM)	2,204	6	199	20,136	677	-	23,221
of which CCP – default fund contributions	-	-	83	1,099	34	107	1,323
of which CVA	100	65	119	2,000	4	7	2,294
Settlement risk	**-**	**-**	**-**	**3**	**-**	**-**	**3**
Securitisation exposures in the banking book	**2,337**	**291**	**5,317**	**2,433**	**-**	**133**	**10,510**
of which internal ratings based approach (SEC-IRBA)	1,423	66	2,347	488	-	-	4,324
of which standardised approach (SEC-SA)	230	7	270	750	-	-	1,257
of which external ratings based approach (SEC-ERBA)	13	89	55	20	-	-	177
of which IRB approach	5	106	301	237	-	133	781
of which IRB supervisory formula approach (SFA)	627	-	2,015	930	-	-	3,571
of which standardised approach	39	22	330	9	-	-	400
Market risk	**38**	**353**	**699**	**17,562**	**639**	**5**	**19,296**
of which standardised approach	38	225	666	808	35	5	1,776
of which internal model approach (IMA)	-	129	34	16,754	604	-	17,521
Operational risk	**20,969**	**18,413**	**10,433**	**15,033**	**3,498**	**544**	**68,891**
of which basic indicator approach	650	2,689	232	232	408	160	4,371
of which standardised approach	1,382	6,948	1,146	500	115	153	10,243
of which advanced measurement approach (AMA)	18,937	8,777	9,055	14,302	2,975	231	54,278
Amounts below the thresholds for deduction (subject to 250% risk weight)	**1,133**	**6,157**	**14**	**540**	**55**	**8,476**	**16,376**
TOTAL	**229,741**	**216,727**	**115,507**	**66,899**	**8,006**	**31,947**	**668,828**

RWAs *In millions of euros*	31 December 2018						
	Retail Banking & Services		Corporate & Institutional Banking				
	Domestic Markets	International Financial Services	Corporate Banking	Global Markets	Securities Services	Corporate Centre	Total
Credit risk	**201,178**	**181,846**	**93,573**	**5,561**	**2,773**	**18,920**	**503,851**
of which standardised approach	63,388	138,353	6,329	1,745	575	9,991	220,383
of which advanced IRB approach	132,570	18,597	86,572	2,692	1,603	288	242,323
of which equity positions under the simple weighting method	5,219	24,896	672	1,124	594	8,641	41,146
Counterparty credit risk	**2,249**	**708**	**515**	**21,561**	**1,440**	**161**	**26,634**
of which mark-to-market method	296	527	7	875	827	20	2,552
of which internal model method (IMM)	1,834	8	110	17,195	555	-	19,702
of which CCP – default fund contributions	-	-	276	833	53	127	1,289
of which CVA	119	172	122	2,659	5	14	3,090
Settlement risk	**-**	**-**	**-**	**12**	**-**	**-**	**12**
Securitisation exposures in the banking book	**836**	**205**	**1,178**	**4,479**	**-**	**342**	**7,040**
of which IRB approach	10	138	70	1,115	-	342	1,675
of which IRB supervisory formula approach (SFA)	631	-	1,108	2,562	-	-	4,301
of which standardised approach	196	67	-	802	-	-	1,064
Market risk	**39**	**284**	**1,295**	**17,846**	**476**	**7**	**19,948**
of which standardised approach	39	208	1,216	702	50	7	2,222
of which internal model approach (IMA)	-	76	79	17,144	427	-	17,726
Operational risk	**23,606**	**19,172**	**9,970**	**15,962**	**3,459**	**778**	**72,947**
of which basic indicator approach	1,145	3,429	203	241	406	196	5,619
of which standardised approach	1,789	6,338	1,201	723	102	241	10,393
of which advanced measurement approach (AMA)	20,673	9,405	8,567	14,998	2,951	341	56,935
Amounts below the thresholds for deduction (subject to 250% risk weight)	**1,207**	**5,420**	**9**	**484**	**54**	**9,395**	**16,569**
TOTAL	**229,115**	**207,635**	**106,541**	**65,905**	**8,203**	**29,603**	**647,001**

The split of risk-weighted assets by domain reflects the Group's diversified business mix, with 67% devoted to Retail Banking & Services (including 35% for the Domestic Markets and 32% for International Financial Services), 28% to Corporate & Institutional Banking and 5% to Corporate Centre.

The increase in the Group's risk-weighted assets was EUR 22 billion over 2019, with a EUR 10 billion increase in Corporate & Institutional Banking, including EUR 9 billion in Corporate Banking, a EUR 9 billion increase in International Financial Services, mainly in Insurance, Personal Finance and BancWest, and a EUR 2 billion increase in Corporate Centre. Domestic Markets risk-weighted assets increased slightly, by EUR 1 billion, with an increase in French Retail Banking offset by a decline in Belgian Retail Banking and Arval.

CAPITAL ADEQUACY AND CAPITAL PLANNING

CAPITAL ADEQUACY

The BNP Paribas Group is required to comply with a range of regulations:

- European banking regulations under the CRR and CRD 4, which also cover banking supervision;
- regulation relating to financial conglomerates in respect of additional supervision of its banking and insurance activities. BNP Paribas' insurance business is governed by Solvency II insurance regulations since 1 January 2016.

Within the context of the Single Supervisory Mechanism, the ECB thus became the direct supervisor of BNP Paribas as of 4 November 2014. The ECB draws on the competent national supervisory authorities in fulfilling this role.

Requirements under banking regulations and supervision

With respect to Pillar 1, the Group is required to meet:

- a minimum Common Equity Tier 1 (CET1) capital ratio of 4.5%;
- a minimum Tier 1 capital ratio of 6%;
- a minimum Total capital ratio of 8%.

Additional requirements known as buffers

In addition to the minimum capital requirements regarding Pillar 1, BNP Paribas have to maintain additional CET1 capital buffers:

- the capital conservation buffer is equal to 2.5% of the risk-weighted assets. The aim of this buffer is to absorb losses in a situation of intense economic stress;
- the following three buffers were defined to limit systemic risk. Only the highest of these three buffers is applicable:
  - the buffer for Global Systemically Important Banks (G-SIBs) consists of a surcharge of CET1 capital defined by the Financial Stability Board based on the methodology developed by the Basel Committee, which corresponds to the global systemic importance of banks. Global systemic importance is measured in terms of the impact of a bank's failure can have on the global financial system and the wider economy.

    The measurement approach of the global systemic importance is indicator-based. The selected indicators reflect the size of banks, their interconnectedness, the use of banking information systems for the services they provide, their global cross-jurisdictional activity and their complexity. The methodology is described in the document published in July 2013 by the Basel Committee, entitled *"Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement"* (BCBS 255).

    In April 2019, BNP Paribas published the values of the G-SIBs indicators as at 31 December 2018. Details of the values of G-SIBs indicators can be found in the *Conferences and publications* section of the Investor Relations website: https://invest.bnpparibas.com/en/conferences-and-publications.

    The Financial Stability Board published the list of systemically important banks for 2019 on 22 November 2019. Since 2017, BNP Paribas is classified in group 2 which sets the additional Common Equity Tier 1 capital requirement at 1.5% until 2021.

    The next update of the Group indicators is due for publication at the end of April 2020,
  - the buffer for Domestic Systemically Important Banks (D-SIBs) aims to strengthen the capital requirements for institutions whose failure would have an impact on the national economy. The D-SIBs buffer for BNP Paribas is set at 1.5% until 2020,
  - the systemic risk buffer aims to limit systemic or macroprudential non-cyclical risks in the long term. This buffer is not significant for the Group;
- the countercyclical capital buffer is defined as a surcharge of CET1 capital whose purpose is to adjust over time to increase the capital requirements in periods when credit growth is accelerating and reduce them in slower periods. A rate may be activated in each country by a discretionary decision from the appointed national authority. In view of the rates by country applicable for 2019, the BNP Paribas countercyclical capital buffer is 0.17% at 31 December 2019. The Group's countercyclical capital buffer will gradually increase with the increase of rates in certain countries and could reach 0.35% as of 31 December 2020 and 0.36% as of 1 January 2021 (see Appendix 3 *Countercyclical Capital Buffer*).

Pillar 2 requirements

With respect to supervision, the second Pillar of the Basel Agreement provides that the supervisor shall determine whether the policies, strategies, procedures and arrangements implemented by the Group on the one hand, and the capital held on the other hand, are adequate for risk management and risk coverage purposes. This evaluation exercise by the supervisors to determine the adequacy of mechanisms and capital with respect to bank risk levels is designated in the regulations under the term SREP (Supervisory Review and Evaluation Process).

ICAAP (Internal Capital Adequacy Assessment Process) is the process by which institutions assess the adequacy of their capital with their internal measurements of the levels of risk generated by their usual activities. ICAAP is used by the supervisory authorities for the annual SREP.

Within the BNP Paribas Group, the ICAAP is based on two key principles: the verification that the level of available capital is adequate with respect to the capital requirements, and the forward-looking capital planning.

The capital adequacy assessment relies on two perspectives:

- the regulatory perspective, described in the CRD 4 and the CRR, according to which all Pillar 1 risks must be covered by regulatory capital;
- the internal perspective, built around a comprehensive review of the Pillar 1 risks specified by Basel regulations, as well as the Pillar 2 risks defined in the Group's risk appetite framework and identified as material within the framework of the Group's risk inventory system. From this perspective, Pillar 1 and Pillar 2 risks are assessed using internal quantitative approaches, supplemented, as necessary, by qualitative approaches and dedicated monitoring frameworks.

Capital planning is based on the most recent actual and estimated financial data available at the time. These data are used to project future capital requirements, in particular by factoring in the Group's goal of maintaining a first-class credit rating to protect its origination capability, its business development targets and anticipated regulatory changes.

Capital planning consists of comparing the capital ratio targets defined by the Group with future projected capital requirements, then testing their robustness in a stressed macroeconomic environment.

Notification of SREP results

The results of the SREP process are notified annually to BNP Paribas's Executive Management by the ECB. The notification of SREP results for 2019 was dated on 10 December 2019.

The SREP decision comprises two items: a requirement known as the "Pillar 2 requirement", and a non-public guidance called "Pillar 2 guidance". Following the ECB's notification of the outcome of the 2019 annual SREP, the Common Equity Tier 1 (CET1) capital "Pillar 2 requirement" for the Group for 2020 is unchanged at 1.25%. This requirement must be covered, in full, by CET1 capital.

Overall capital requirements

The Group's CET1 ratio, Tier 1 ratio and total capital ratio must satisfy at all times the following requirements corresponding to the limits of applicable distribution restrictions (Maximum Distributable Amount – MDA):

- the minimum CET1 ratio, Tier 1 ratio and total capital ratio, respectively, in accordance with article 92 (1) points a), b) and c) of the CRR;
- the Pillar 2 requirement;
- the Combined buffer requirement defined in article 128 (6) of CRD 4, as transposed into the respective national laws.

➤ TABLE 20: OVERALL CAPITAL REQUIREMENTS

	2019	2020
CET1: Minimum requirements (Pillar 1)	4.50%	4.50%
Pillar 2 requirement(*)	1.25%	1.25%
Combined Buffer Requirement	4.17%	4.35%
of which capital conservation buffer	*2.50%*	*2.50%*
of which G-SIBs buffer	*1.50%*	*1.50%*
of which countercyclical capital buffer(**)	*0.17%*	*0.35%*
OVERALL CET1 CAPITAL REQUIREMENT	**9.92%**	**10.10%**
Tier 1: Minimum requirement (Pillar 1)	6.00%	6.00%
Pillar 2 requirement(*)	1.25%	1.25%
Combined Buffer Requirement	4.17%	4.35%
OVERALL TIER 1 CAPITAL REQUIREMENT	**11.42%**	**11.60%**
Total capital: Minimum requirement (Pillar 1)	8.00%	8.00%
Pillar 2 requirement(*)	1.25%	1.25%
Combined Buffer Requirement	4.17%	4.35%
OVERALL TOTAL CAPITAL REQUIREMENT	**13.42%**	**13.60%**

(*) Only the Pillar 2 requirement is made public.
(**) Countercyclical capital buffer as at 31 December 2019 and 31 December 2020.

The CET1 capital requirement is 9.92% at 31 December 2019 and 10.10% at 31 December 2020 (excluding Pillar 2 guidance), in view of the capital conservation buffer at 2.5%, a G-SIBs buffer at 1.5%, the gradual activation of the countercyclical buffer in certain countries and a Pillar 2 requirement at 1.25%.

With a CET1 capital ratio of 12.1% as at 31 December 2019, BNP Paribas is above the minimum requirement applicable for 2019, as notified in the SREP. Compared to 31 December 2018, the CET1 ratio was up 30 basis points as at 31 December 2019, an increase due to:

- the 2019 net income excluding exceptional other non operating items, after taking into account a 50% dividend pay-out ratio (+60 bp);
- the impact of the new IFRS 16 accounting standard (-10 bp)
- the increase in risk-weighted assets at constant change net of the impact of securitisation (-40 bp);
- the net impact of disposals and acquisitions (SBI Life, deconsolidation of the residual stake in this subsidiary, Prime Brokerage) as well as the partial impairment of BancWest's goodwill (+20 bp);
- other effects (including currency effect) have a limited impact on the ratio.

BNP Paribas ratios are monitored and managed centrally, on a consolidated basis. Where a French or international entity is required to comply with banking regulations at its own level, its ratios are also monitored and managed directly by the entity (see paragraph *Capital management at local level*).

Requirements applicable to the Insurance business

Since 1 January 2016, BNP Paribas' insurance business is governed by Solvency II, the standard for calculating the solvency coverage ratio (Directive 2009/138/EC as transposed into French law).

The objective of Solvency II is to:

- integrate the concepts of risks and risk appetite to which insurance companies are exposed;
- harmonise the insurance regulatory regimes across Europe;
- give more power to supervisory authorities.

Solvency II is divided into three pillars aiming to:

- Pillar 1: assess solvency using what is known as an economic capital-based approach;
- Pillar 2: implement qualitative requirements, *i.e.* governance and risk management rules that include a forward-looking approach to risk assessment. This assessment is called ORSA (Own Risk & Solvency Assessment);
- Pillar 3: improve the transparency of the insurance business by making solvency the cornerstone of disclosures to the public and the supervisory authority.

The BNP Paribas Cardif group complies with this regulation both in terms of risk management and governance, as well as calculation and reporting. Solvency II-related data as at 31 December 2018 are available in the Solvency and Financial Condition Report (SFCR) for the BNP Paribas Cardif group, published on the institutional website https://www.bnpparibascardif.com.

Insurance risks are presented in section 5.10 *Insurance risks*.

Solvency II sets out two capital requirements:

- the Solvency Capital Requirement (SCR);
- the Minimum Capital Required (MCR) or, for groups, the SCR Group Minimum.

The SCR (Solvency Capital Requirement) is the level of own funds required to absorb a full series of bicentenary impacts after accounting for the correlation between risks. It is calibrated to cover such an event with a return period of 200 years within a one-year timescale (Value at Risk at 99.5%). The BNP Paribas Cardif SCR is evaluated by means of the standard formula laid down by the regulation.

The Capital Management Policy of BNP Paribas Cardif aims notably to ensure that the prudential solvency requirement are met, to cover at least 100% of the SCR defined within the scope of the ORSA assessment and to structure own funds so that the best balance can be found between the share capital, subordinated debt and other own funds elements, complying with the limits and levels laid down by regulations.

As at 31 December 2018, eligible own funds to meet the SCR stood at EUR 11,418 million. The amount of SCR was EUR 7,506 million and the SCR coverage ratio was 152%. Eligible own funds to meet the SCR Group Minimum amounted to EUR 8,568 million. The amount of SCR Group Minimum was EUR 3,629 million, and the SCR Group Minimum coverage ratio was 236%.

The Solvency Report as at 31 December 2019 will be published on 19 May 2020.

Compliance with the regulation on the additional supervision of financial conglomerates

As a bancassurer, the BNP Paribas Group is also subject to additional supervision as a financial conglomerate, pursuant to European Directive 2002/87/EU, supplemented by Delegated Regulation 342/2014 of the European Commission and implemented into French law by the Order of 3 November 2014.

The financial conglomerates directive has established additional prudential supervision, added to the rules existing in the banking and insurance sectors, because it has introduced additional constraints on capital adequacy, the monitoring of large exposures, and intragroup transactions.

A financial conglomerate is required to meet additional capital adequacy requirements on a consolidated basis. The purpose is to require sufficient capital to cover both banking sector and insurance sector risks, while eliminating multiple gearing.

The capital surplus or shortfall results from the difference between the financial conglomerate's equity capital and the solvency requirements applicable to the banking and insurance industries:

- the financial conglomerate's capital is determined based on the sector's solvency rules (CRR for the banking sector and Solvency II for the insurance sector);
- the requirements for the financial conglomerate are determined on the basis of banking sector requirements, calculated according to the CRR and CRD 4 rules, including all capital buffers as well as the requirement resulting from the SREP 2018 applicable in 2019, and on the basis of the solvency capital requirement (SCR) for the insurance sector, calculated in accordance with the Solvency II regulation.

In calculating the financial conglomerate's capital adequacy, the requirements and deductions of insurance entities are treated in compliance with Solvency II rules in replacement of the rules defined in the CRR. The latter consist primarily of a 370% weighting of investments in equities treated according to the simple weighting method (see section 5.4, *Credit risk: equities under the simple weighting method*).

Governance for the prudential supervision of financial conglomerates falls to the Capital Committee, which meets quarterly under the Chairmanship of the Chief Operating Officer.

As at 31 December 2019, BNP Paribas Group, as a financial conglomerate, had capital of EUR 114.1 billion compared to a total requirement of EUR 95.5 billion, which represents a capital surplus of EUR 18.6 billion. This surplus takes into account the effect of the Decree of 24 December 2019 on life insurance surplus capital. This amount is estimated at EUR 3.5 billion based on a fixed value of 70% of the accounting value of the provision for profit-sharing.

RECOVERY AND RESOLUTION

Following the 2008/2009 financial crisis, international banking regulatory bodies adopted a series of regulations and directives based on the recommendations of the Financial Stability Board to facilitate the authorities' management of crises involving financial institutions and limit the impact of a potential collapse on the economy and public finances. They provide for:

- powers and instruments for the supervisory authorities to allow for better anticipation and oversight of the recovery of banks in difficulty, particularly by means of recovery plans;
- powers and instruments for the resolution authorities in order to implement orderly resolution of a bank that would not have been able to recover by itself and would be placed in resolution. This is based among other things on the resolution documents required from banks;
- the addition of further regulatory requirements for institutions. These requirements – which overlap quite largely – aim to ensure a sufficient quantity of liabilities able to absorb losses or be converted into equity. In particular, they consist of:
  - a TLAC (Total Loss Absorbing Capacity) minimum ratio for Global Systemically Important Banks (G-SIBs),
  - a MREL (Minimum Requirement for own funds and Eligible Liabilities) applicable to all European institutions;
- bail-in rules for banks, with a review of the ranking of creditors including a category of TLAC eligible debt (non preferred senior) created in 2016, plus the creation in 2014 of a resolution fund financed by the banks, with the aim of avoiding any recourse to public assistance.

The recommendations of the Financial Stability Board were transposed into French banking law in July 2013, introducing in particular the obligation to create recovery and resolution plans, and resolution powers for the ACPR (*Autorité de contrôle prudentiel et de résolution*).

On a European level, the Directive 2014/59/EU (BRRD - Bank Recovery and Resolution Directive) was passed in 2014 and has been transposed into the law of all European Union Member States. This directive, as well as the Regulation (EU) No. 806/2014 (SRM Regulation - Single Resolution Mechanism Regulation) of 2014 and various additional delegated regulations, form all of the current regulations governing the recovery and resolution of European financial institutions. The amendments contained in BRRD 2, CRD 5 and CRR 2 proposed by the European Commission in November 2016 were approved and published in the Official Journal on 7 June 2019. At a national level, the transposition of BRRD 2 and CRD 5 must be finalised by 28 December 2020.

Recovery Plan

The recovery plan, prepared at Group level, describes the possible recovery options if the Group were to find itself in a distressed situation. It also contains information needed by the authorities to understand the Group's operations, resilience and capacity to absorb losses.

BNP Paribas submitted its updated Recovery Plan to its supervisor, the ECB, in September 2019. The Single Resolution Board (SRB) and other authorities can obtain the Recovery Plan from the ECB.

Prepared in accordance with the Financial Stability Board's recommendations, and pursuant to the provisions of the French Monetary and Financial Code, this Recovery Plan was submitted to the Board of Director's Internal Control, Risk Management and Compliance Committee (CCIRC) for review and then to the Board of directors for approval (see chapter 2 *Corporate governance and Internal Control*).

The new version of the Plan includes updated figures and takes account of changes in the Group's organisation and activities. It is accompanied by a detailed description of the recovery scenarios used and the impacts of the recovery options identified. It also takes account of the comments of the ECB and the Recovery College's participating authorities, which met in January 2019, as well as developments in European regulations.

This Recovery College, organised under the auspices of its supervisor, the ECB, brings together the authorities of the member countries of the European Union in which BNP Paribas has a presence, as well as the European Banking Authority.

Resolution documentation

In December 2019, BNP Paribas submitted a set of documents to the *Autorité de contrôle prudentiel et de résolution* (ACPR) to be forwarded to the Single Resolution Board (SRB). These documents contain information that may be needed by the authorities to prepare a plan for the resolution of BNP Paribas, should it become necessary.

Since 2016, the Bank provides annually a series of templates. These include an analytical declaration of the Bank and its subsidiaries' liabilities (Liability Data Report), required by the SRB to clarify the situation in its analyses of future requirements for liabilities eligible for bail-in, as well as various financial analyses, a presentation on the Bank's organisational structure and even analyses of its critical functions and operational continuity in resolution. These declarations are in line with the requirements formalised by the EBA (on behalf of the Commission).

In 2019, BNP Paribas took part in a series of working meetings of the Internal Resolution Team (IRT), including the SRB, the ACPR and other EU bank resolution authorities, under the auspices of the SRB.

The purpose of these meetings, in which a series of questionnaires completed by BNP Paribas were discussed, was to deepen the SRB's analyses of the Group's capacity to deal with resolution measures.

The Crisis Management Group (CMG) and the Resolution College met in September 2019 to approve the resolution plan drafted by the SRB.

The resolution strategy recommended by the SRB for major institutions such as BNP Paribas is that of "bail-in" which, in contrast to "bail-out", involves the absorption of losses through the bank's internal resources. This is reflected in the cancellation or reduction in the nominal value of a debt and/or its complete or partial conversion into equity. For major centralised banking groups such as BNP Paribas, this resolution strategy is applied at the Single Point of Entry (SPE), *i.e.* BNP Paribas SA, regardless of where the losses occur within the Group.

With regard to the U.S. authorities, in December 2018, BNP Paribas presented a resolution plan for its activities in the United States, pursuant to Rule 165(d) of the Dodd-Frank Act. The next plan will be submitted in 2021.

TLAC

In accordance with Regulation (EU) No. 2019/876, Global Systemically Important Banks (G-SIB) have been subject to a twofold TLAC requirement since 27 June 2019. This requirement includes on the one hand a minimum ratio expressed as a percentage of the risk-weighted assets, and on the other hand a minimum ratio expressed as a percentage of the leverage ratio exposures.

At 31 December 2019, the minimum TLAC requirement for the Group stood at 20.17% of the risk-weighted assets, in view of:

- a 16% TLAC minimum requirement (18% from 1 January 2022);
- a 4.17% Combined buffer requirement, in view of the capital conservation buffer at 2.5%, the G-SIBs buffer at 1.5% and the countercyclical capital buffer at 0.17%.

From 27 June 2019 to 31 December 2021, the Group's minimum TLAC requirement was 6% of the leverage ratio exposures. From 1 January 2022, this will rise to 6.75%.

TABLE 21: TLAC RATIO

In millions of euros	31 December 2019
Total regulatory capital	**103,716**
of which Common Equity Tier 1 capital (CET1)	*81,204*
of which Additional Tier 1 capital (AT1)	*8,758*
of which Tier 2 capital (T2)	*13,753*
Total capital: regulatory adjustments	**275**
of which amortised portion of Tier 2 instruments with remaining maturity over one year	*275*
TOTAL TLAC-ELIGIBLE OWN FUNDS	**103,991**
Non preferred senior debt(*)	**39,648**
TOTAL CAPITAL AND OTHER ELIGIBLE LIABILITIES	**143,639**
Risk-weighted assets	**668,828**
TLAC RATIO *(In percentage of risk-weighted assets)*	**21.5%**

(*) Outstanding capital.

With a 21.5% TLAC ratio at 31 December 2019, the Group is above the minimum requirement, without taking into account the preferred senior debt eligible within the limit of 2.5% of the risk-weighted assets. The TLAC ratio would stand at 24.0% if the Group included the senior preferred debt.

At 31 December 2019, TLAC ratio stood at 7.3% of leverage ratio exposure.

TABLE 22: TLAC RATIO – EFFECT OF PREFERRED SENIOR DEBT ELIGIBLE AT ISSUER'S DISCRETION

	31 December 2019
TLAC ratio	**21.5%**
Effect of preferred senior debt eligible at issuer's discretion(*)	2.5%
TLAC RATIO AFTER EFFECT OF PREFERRED SENIOR DEBT ELIGIBLE AT ISSUER'S DISCRETION	**24.0%**

(*) In accordance with Regulation (EU) No. 2019/876, article 72ter paragraphs 3 and 4, some preferred senior debt instruments (amounting to EUR 18,294 million at 31 December 2019) are eligible within the limit of 2.5% of risk-weighted assets (3.5% from 1 January 2022, in accordance with article 494 of Regulation (EU) No. 2019/876).

The debt issuance targets aimed at satisfying these requirements and their nature are described in the section *Wholesale funding trends based on regulatory changes* in section 5.8 *Liquidity risk*.

MREL

The MREL (Minimum Requirement for own funds and Eligible Liabilities) is intended to apply to all European Union credit institutions and investment firms. The procedures for calculating this requirement, specific to each institution, have evolved as part of the CRR 2 and BRRD 2 texts. Unlike the TLAC, for which the regulatory requirements became applicable immediately after the CRR 2 came into force (27 June 2019), regulatory requirements in relation to the MREL arising from BRRD 2 must be transposed into French law, which is expected by December 2020. After an industry consultation period, the SRB also plans to publish a new set of rules reflecting the regulatory changes in the second quarter of 2020. Institutions are obliged to comply with their MREL requirement from 1 January 2024 at the latest. However, resolution authorities have the opportunity to set a transitional MREL requirement starting from 1 January 2022.

Changes in regulations

BNP Paribas closely tracks the regulatory developments relating to bank recovery and resolution, in particular:

- the transposition of the directives BRRD 2 and CRD 5 into French law;
- the work of the Financial Stability Board, in particular, on clearing house resolution, liquidity strategy, the practical implementation of "bail-in" tools, and more generally on requirements on resolution;
- discussions focused on the creation of a European Deposit Insurance Scheme (EDIS).

LEVERAGE RATIO

The leverage ratio's main objective is to serve as a complementary measure to the risk-based capital requirements (back-stop principle).

It is calculated as the ratio between Tier 1 capital and an exposure measure calculated using on- and off-balance sheet commitments valued using a prudential approach. In particular, derivatives and repurchase agreements are also adjusted.

At a European level, the leverage ratio requirement is applied gradually in accordance with the provisions contained in the CRR and CRR 2:

- since 1 January 2014, the leverage ratio has been the subject of a statement submitted to the ECB via regulatory reports;
- since 1 January 2015, banks have been required to publish this ratio under Pillar 3;
- from 28 June 2021, institutions will be subject to a minimum leverage ratio requirement of 3%;
- from 1 January 2022, Global Systemically Important Banks (G-SIBs) will be subject to an additional leverage requirement of 50% of the institution's G-SIBs buffer (see *Capital adequacy* section).

Processes used to manage the risk of excessive leverage

Monitoring of the leverage ratio is one of the responsibilities of the Capital Committee (as described in the section *Capital management* hereafter).

Factors that had an impact on the leverage ratio during the period to which the disclosed leverage Ratio refers

The leverage ratio was 4.6% as of 31 December 2019, compared to 4.5% as of 31 December 2018.

Since 31 December 2018, the exposures used for the leverage ratio take into account the exemption related to centralised exposures with the *Caisse des dépôts et consignations* as regulated savings.

➤ TABLE 23: LEVERAGE RATIO – ITEMISED

➤ *Summary reconciliation of accounting assets and leverage ratio exposures (EU LRSum)*

	In billions of euros	31 December 2019	31 December 2018
1	Total assets as per published financial statements	2,165	2,041
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(244)	(215)
4	Adjustments for derivative financial instruments	(102)	(80)
5	Adjustment for securities financing transactions (SFTs)(*)	(5)	(5)
6	Adjustment for off-balance sheet items (*i.e.* conversion to credit equivalent amounts of off-balance sheet exposures)	176	160
EU-6b	Adjustment for exposures exempt from the total exposure for the purposes of the ratio in respect of article 429, paragraph 14, of Regulation (EU) No. 575/2013	(15)	(17)
7	Other adjustments	(19)	(18)
8	**LEVERAGE RATIO TOTAL EXPOSURE MEASURE**	**1,955**	**1,864**

(*) Securities Financing Transactions: repurchase agreements and securities borrowing/lending.

Leverage ratio common disclosure (EU LRcom)

In billions of euros		31 December 2019	31 December 2018
	On-balance sheet exposures (excluding derivatives and SFTs(*))		
1	On-balance sheet items (excluding derivatives, SFTs(*) and fiduciary assets, but including collateral)	1,462	1,397
2	(Asset amounts deducted in determining Tier 1 capital)	(16)	(15)
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)**	**1,446**	**1,381**
	Derivative exposures		
4	Replacement cost associated with all derivatives transactions (*i.e.* net of eligible cash variation margin)	51	42
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	149	144
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(38)	(30)
8	(Exempted CCP leg of client-cleared trade exposures)	(21)	(18)
9	Adjusted effective notional amount of written credit derivatives	481	450
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(464)	(424)
11	**Total derivatives exposures (sum of lines 4 to 10)**	**158**	**162**
	SFT(*) exposures		
12	Gross SFT(*) assets (with no recognition of netting), after adjusting for sales accounting transactions	351	284
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(175)	(112)
14	Counterparty credit risk exposure for SFT(*) assets	14	7
16	**Total securities financing transaction(*) exposures (sum of lines 12 to 14)**	**191**	**179**
	Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	435	401
18	(Adjustments for conversion to credit equivalent amounts)	(259)	(241)
19	**Other off-balance sheet exposures (sum of lines 17 and 18)**	**176**	**160**
	Exposures exempted in accordance with article 429 (7) and (14) of Regulation (EU) No. 575/2013 (on-balance sheet and off-balance sheet exposures)		
EU-19b	(Exposures exempted in accordance with article 429 (14) of Regulation (EU) No. 575/2013 (on and off balance sheet))	(15)	(17)
	Capital and total exposure measure		
20	**Tier 1 capital(**)**	**90**	**85**
21	**Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19b)**	**1,955**	**1,864**
22	**LEVERAGE RATIO**	**4.6%**	**4.5%**

(*) Securities Financing Transactions: repurchase agreements and securities borrowing/lending.
(**) In accordance with the eligibility rules for grandfathered debts in additional Tier 1 capital applicable in 2019.

➤ *Breakdown of on-balance sheet exposures (excluding derivatives, SFTs(*) and exempted exposures) (EU LRspl)*

	In billions of euros	31 December 2019	31 December 2018
EU-1	**Total on-balance sheet exposures (excluding derivatives, SFTs(*), and exempted exposures), of which:**	**1,446**	**1,381**
EU-2	Trading book exposures	128	117
EU-3	Banking book exposures, of which:	1,319	1,264
EU-5	Exposures treated as sovereigns	297	310
EU-6	Exposures to regional governments, multilateral development banks, international organisations and public sector entities not treated as sovereigns	36	30
EU-7	Institutions	37	32
EU-8	Secured by mortgages of immovable properties	199	195
EU-9	Retail exposures	219	212
EU-10	Corporate	317	294
EU-11	Exposures in default	14	15
EU-12	Other exposures (e.g. equity, securitisations, and other items)	200	175

(*) Securities Financing Transactions: repurchase agreements and securities borrowing/lending.

Pursuant to article R.511-16-1 of French Monetary and Financial Code, BNP Paribas's asset yield (i.e. net accounting income divided by the total balance sheet on a consolidated basis) is 0.40% in 2019 compared to 0.39% in 2018.

CAPITAL MANAGEMENT [Audited]

To ensure the Group's sustainability, the Bank must maintain an adequate level of capital with respect to the risks to which it is exposed and its strategy. Capital is a rare and strategic resource which requires stringent, clearly defined, rigorous management according to an approach which takes account of the needs and demands of stakeholders, including shareholders, supervisors, creditors and depositors.

OBJECTIVES

BNP Paribas' capital management:

- is governed by policies and procedures which make it possible to understand, document and supervise capital management practices throughout the Bank;
- takes risk measurement into account to determine the use of the capital;
- considers capital requirements and resources under normal operating conditions, as well as under situations of severe, but plausible stress;
- presents a forward-looking vision of the Bank's capital adequacy to the Executive Management;
- allocates the capital constraint to the business lines in keeping with their strategic objectives;
- complies with the Internal Capital Adequacy Assessment Process (ICAAP);
- is monitored by an appropriate governance.

CAPITAL MANAGEMENT AT CENTRAL LEVEL

BNP Paribas' capital management aims to ensure and verify that the Group has adequate capital to comply with the regulatory capital ratios, as well as specific requirements, for instance to operate as a Global Systemically Important Bank. To ensure its capital adequacy, the Group abides by the following principles:

- maintaining the capital at an appropriate level in view of BNP Paribas' activities, risk appetite, growth and strategic initiatives;
- maintaining BNP Paribas' capital at a level which complies with regulatory requirements;
- keeping a balance between capital adequacy and return on capital;
- meeting its obligations *vis-à-vis* creditors and counterparties, at each due date;
- continuing to operate as a financial intermediary.

Governance

The governance of the development, approval and update of the capital planning process is handled by two committees:

- the Risk-Weighted Assets Committee: it is jointly chaired by the Chief Financial Officer and the Chief Risk Officer, and comprises the operational divisions' Chief Financial Officers and Chief Risk Officers. The Committee meets quarterly to examine forecasts of the Group's risk-weighted assets in the context of the budget cycle and updating of its estimates.

The Risk-Weighted Assets Committee is tasked with:

- monitoring and discussing the forecasts of the Group's risk-weighted assets for each business line,
- identifying the main assumptions underlying these forecasts and checking their accuracy,
- identifying any evolution factors and quantifying their impacts,
- proposing adjustments if required;

- the Capital Committee: it meets at least quarterly and is chaired by the Chief Operating Officer. The Committee's mission is to validate the Group's targets in terms of solvency ratios and Total Loss-Absorbing Capacity (TLAC) requirements as well as the trajectory to achieve these targets; monitor compliance with this trajectory; and, where necessary, propose corrective measures, consistent with the Group's Risk Appetite Statement (RAS). The Committee ensures, in this respect, internal capital adequacy is taken into account in the ICAAP as well as in the results of the global stress tests processes.

  The Capital Committee is tasked with:

  - monitoring, validating and anticipating changes in the business lines' risk-weighted assets as well as changes in the Group's prudential ratios, and monitoring these indicators relative to the Group's Risk Appetite, which is stated in the Risk Appetite Statement. This includes the solvency ratios, the additional requirement for financial conglomerate, the TLAC ratio and the leverage ratio,
  - identifying any evolution factors and quantifying their impacts,
  - defining trends in short/medium-term capital consumption and proposing the ensuing arbitrages to the Group's Executive Committee,
  - monitoring internal capital adequacy as part of the ICAAP,
  - monitoring the impacts of global stress test results,
  - monitoring the implementation of the supervisor's decisions that have an impact on the Group's solvency ratio or the amount of its risk-weighted assets.

    The Capital Committee is also the Group's competent Executive Management authority for all issues related to the internal credit and operational risk model and the methodologies used in the ICAAP.

Monitoring indicators

Capital management at the consolidated level rests on the following indicators:

- the solvency ratios:

  BNP Paribas uses the CET1 ratio as its main internal capital management indicator;
- risk-weighted assets:

  the risk-weighted assets are calculated per business line and per type of risk. The change in risk-weighted assets is analysed per type of effect (in particular: volume effect, parameters effect, perimeter effect, currency effect and method effect);
- notional equity:

  the capital allocation transfers the capital constraints to all Group divisions and thus represents a major constraint concerning the Group's development and management. The evaluation of the business lines' performance includes the analysis of their pre-tax Return On Notional Equity – (RONE) indicators. The equity component of this ratio is the notional equity, which corresponds to the business lines' consumption of capital.

This management rests on two major processes which are closely linked:

- a detailed quarterly analysis of actual capital consumption by divisions/business lines and of the Group's solvency ratios, as well as quarterly forecasts of these indicators throughout the year;
- the yearly budget process, which plays a central role in the Bank's strategic planning process.

CAPITAL MANAGEMENT AT LOCAL LEVEL

The Group has to allocate available capital among its different entities. To ensure a free and efficient flow of capital throughout the Group, the capital allocation process within the Group is centralised at head office level. It is mainly based on two principles: compliance with local regulatory requirements and analysis of the local business needs of the entity and growth prospects. In line with these two principles, the aim is to minimise capital dispersion.

With respect to the first principle, the local Chief Financial Officers are responsible for the daily management and reporting of their subsidiaries' capital requirements. When a capital need arises, it is analysed on a case-by-case basis by the Group, taking into consideration the subsidiary's present position and future strategy. Furthermore, each year, the Group manages the subsidiaries' earnings repatriation process. The Group general policy stipulates that the entire distributable profit of every entity, including retained earnings, must be paid out, with exceptions reviewed on a case-by-case basis. This policy ensures that the capital remains centralised at BNP Paribas SA level and also contributes to reducing the foreign exchange risk.

Local Chief Executive Officers are responsible for ensuring the subsidiary's ongoing financial viability and competitiveness in terms of capital, where relevant. However, any capital action requested by a subsidiary is assessed by and subject to authorisation from head office.

With respect to the second principle, the needs of each entity are analysed by dedicated teams in light of the Group's strategy in the relevant country, the entity's growth prospects and the macroeconomic environment.

In addition, every year the Group examines the branches' capital allocations in order to maintain an adequate level of capital in light of the different regulations.

5.3 Risk management [Audited]

GOVERNANCE

The specialised Committees of the Board of directors (see chapter 2, *Corporate Governance and Internal Control*), which examine the risks taken and the risk policies on a Group scale, are:

- the Internal Control, Risk Management and Compliance Committee (CCIRC);
- the Joint Committee that combines the CCIRC and the Financial Statements Committee.

In line with the Group's Risk Appetite Statement, Executive Management gives the broad direction for the major guidelines based on the three key dimensions – risk, capital and liquidity – through the following bodies:

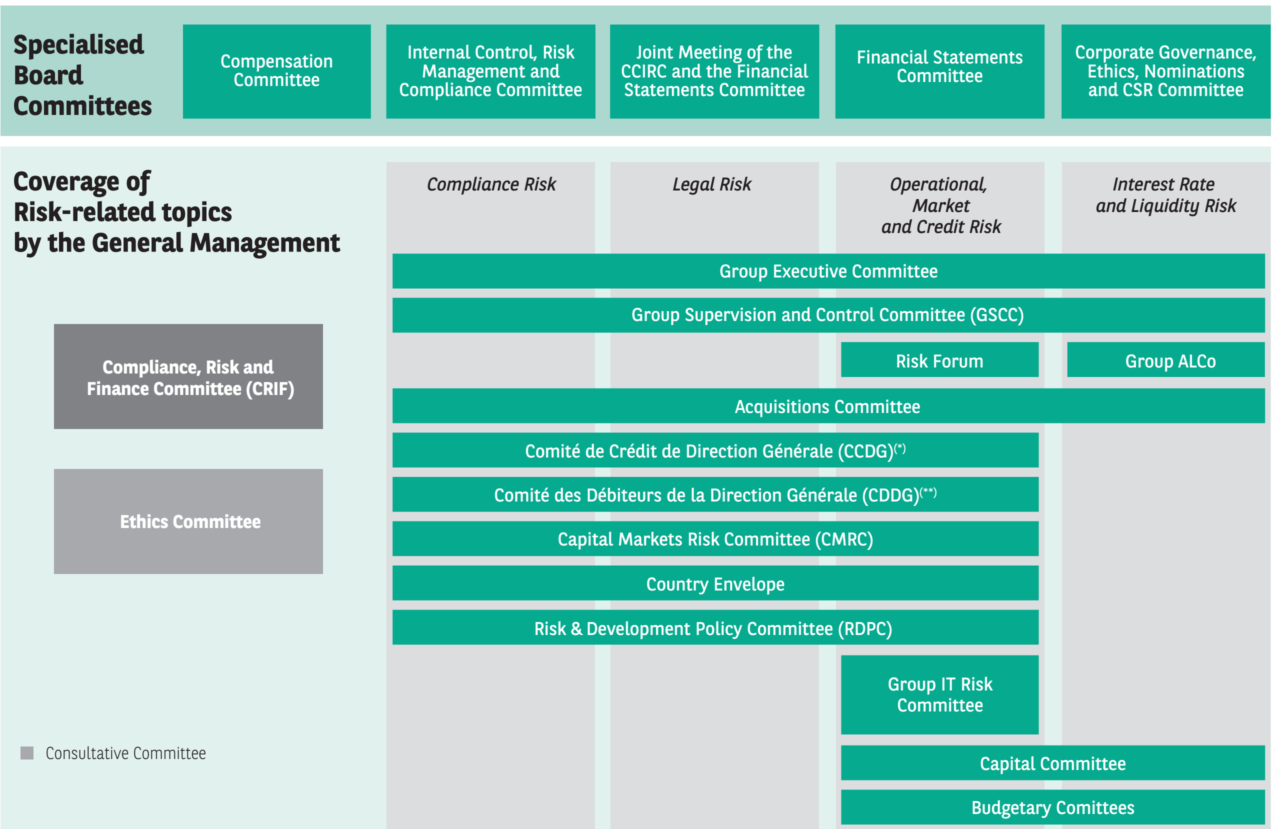
- Risk Forum: examines all risk topics considered as important and identifies those requiring additional analyses or risk decisions by the appropriate committees;
- Capital Committee: described under *Capital management* in section 5.2, validates the Group's objectives in terms of solvency ratios and Total Loss-Absorbing Capacity (TLAC) requirements as well as the trajectory to achieve these targets, monitors the compliance with this trajectory and, when relevant, proposes corrective actions. As the Group's competent Executive Management authority for all issues related to the internal credit and operational model, the Capital Committee is informed of decisions made in the MARCo Committee (Model Approval and Review Committee);
- Group ALM Committee (Group ALCo): responsible for the management of the liquidity risk, interest rate risk in the banking book and structural foreign exchange risk over the whole Group.

Moreover, the Group Supervision and Control Committee (GSCC) brings together the Group's control functions at Executive Management level and takes a Group-wide approach to tackling all aspects of risk exposure.

The following figure shows the main governance bodies at Group level for risk management.

5

FIGURE 5: OVERVIEW OF GROUP LEVEL GOVERNING BODIES COVERING RISK-RELATED TOPICS



(*) *General Management Credit Committee.*

(**) *General Management Doubtful Committee.*

The other main bodies at Group level have the following roles:

- the General Management Credit Committee (CCDG) is the Group's highest authority concerning credit and counterparty risks. This Committee decides on risk-taking and conducts annual reviews of authorisations for customers or groups, beyond certain authorisation thresholds, in line with their ratings or the Bank's activities. Transactions of a special nature may also be presented to the CCDG. Lastly, a Compliance Officer may attend CCDG meetings when an opinion on financial security is needed;
- the General Management Doubtful Loan Committee (CDDG) is the Group's highest level decision-making committee in terms of specific provisioning and recognitions of losses relative to the Group's customer exposures;
- the Capital Markets Risk Committee (CMRC) is the body which governs the Group's risk profile of the capital markets activities; its tasks include, among others, analysing market and counterparty risks and setting limits for capital market activities;
- the Country Envelope Committees determine the BNP Paribas Group's Risk Appetite by setting limits for medium-to-high-risk countries in view of risk in relation to country, market conditions, business strategies and aspects of risk and compliance;
- the Risk & Development Policy Committees (RDPC) have the dual objective of defining an appropriate risk policy for any given subject which may be a business activity, a product, a geographic area (region or country), a customer segment or economic sector, and of investigating development opportunities in relation to the subject in question;
- the Group IT Risk Committee (GITRC) defines and oversees the BNP Paribas Group's IT risk profile. This is the highest authority in terms of technological and cybersecurity risk management.

RISK MANAGEMENT ORGANISATION

POSITION OF THE CONTROL FUNCTIONS

Risk management is central to the banking business and is one of the cornerstones of operations for the BNP Paribas Group. BNP Paribas has an internal control system covering all types of risks to which the Group may be exposed, organised around three lines of defence (see the *Internal Control* section in chapter 2 *Corporate Governance and Internal Control*):

- as the first line of defence, internal control is the business of every employee, and the heads of the operational activities are responsible for establishing and running a system for identifying, assessing and managing risks according to the standards defined by the functions exercising an independent control in respect of a second level of control;
- the main control functions within BNP Paribas ensuring the second line of defence are the Compliance, RISK and LEGAL Functions. Their Heads report directly to Chief Executive Officer and account for the performance of their missions to the Board of directors *via* its specialised committees;
- General Inspection provides a third level of defence. It is responsible for the periodic control.

GENERAL RESPONSIBILITIES OF THE RISK AND COMPLIANCE FUNCTIONS

Responsibility for managing risks primarily lies with the divisions and business lines that propose the underlying transactions. RISK continuously performs a second-line control over the Group's credit, market, banking book interest rate, liquidity, operational risks, including technological and cybersecurity risks, over data protection, social and environmental responsibility risks and insurance risks. As part of this role, it must ascertain the soundness and sustainability of the business developments and their overall alignment with the risk appetite target set by the Group. RISK's remit includes formulating recommendations on risk policies, analysing the risk portfolio on a forward-looking basis, approving corporate loans and trading limits, guaranteeing the quality and effectiveness of monitoring procedures and defining or validating risk measurement methods. RISK is also responsible for ensuring that all the risk implications of new businesses or products have been adequately assessed.

Compliance has identical responsibilities as regards compliance and reputation risks. It plays an important oversight and reporting role in the process of validating new products, new business activities and exceptional transactions.

ORGANISATION OF THE RISK AND COMPLIANCE FUNCTIONS

Approach

The RISK organisation fully complies with the principles of independence, vertical integration, and decentralisation issued by the Group's Management for the Group's main control functions (Compliance, RISK, LEGAL, and a third line of defence, General Inspection). Hence within RISK:

- all the teams in charge of risks, including those in operational entities have been integrated in the function with reporting lines to the Chief Risk Officers of these entities;
- the Chief Risk Officers of the entities report to RISK.

Moreover, this organisation enabled the governance of risk management activities to be strengthened, especially regarding model risk management, through RISK Independent Review and Control (RISK IRC) team, reporting directly to the Chief Risk Officer (CRO) which groups together the teams in charge of the independent review of the risk methodologies and models, and in the area of operational risk, with the organisation described in section 5.9 *Operational risk*.

In accordance with international standards and French regulations, Compliance manages the system for monitoring compliance and reputation risks for all of the Group's businesses in France and abroad. The system for monitoring compliance and reputation risks is described in section 5.9.

Role of the Chief Risk Officer

The Group Chief Risk Officer reports directly to the Chief Executive Officer and sits on the Executive Committee of BNP Paribas. He has line authority over all RISK employees. He can veto the risk-related decisions and has no connection, in terms of authority, with the Heads of Core Businesses, business lines and territories. This positioning serves the following purposes:

- ensuring the objectivity of risk control, by removing any involvement in commercial relationships;
- making sure senior management is warned of any deterioration in risk and is rapidly provided with objective and comprehensive information on the status of risks;
- enabling the dissemination, throughout the Bank, of high and uniform risk management standards and practices;
- ensuring the quality of risk assessment methods and procedures by calling on professional risk managers in charge of evaluating and enhancing these methods and procedures in light of the best practices implemented by international competitors.

Role of the Chief Compliance Officer

The Chief Compliance Officer directly reports to the Chief Executive Officer and sits on the Executive Committee of BNP Paribas. He has direct access, if necessary, to the Board of directors and its Internal Control, Risk Management and Compliance Committee. He has no operational activity outside of compliance and reputation risk and no commercial activity, which guarantees his independence of action. As the person responsible for the Compliance Function, he exercises a hierarchical supervision over all the compliance teams in the various business units, geographical areas and functions.

The Compliance Function's mission is to issue opinions and decisions, and provide oversight and second-line controls, in order to give reasonable assurance that the Group's compliance oversight procedures for its transactions are effective and consistent, and that its reputation has been protected.

RISK CULTURE

ONE OF THE GROUP'S CORE FOUNDING PRINCIPLES

The BNP Paribas Group has a strong risk and compliance culture.

Executive Management has chosen to include the risk culture in three of its key corporate culture documents:

- Code of conduct:

  the Group adopted a new code of conduct in 2016. It applies to all employees and defines the rules for our conduct in line with the core values of our corporate culture. For example, employees are reminded in the Code of conduct that the Group's interests are protected by responsible risk-taking in a strict control environment. The Code of conduct also includes rules for protecting customers' interests, financial security, market integrity and professional ethics, which all play an important role in mitigating compliance and reputation risks;
- Responsibility Charter:

  Executive Management drew up a formal Responsibility Charter, inspired by the Group's core values (the "BNP Paribas Way"), management principles and Code of conduct. One of the four commitments is "Being prepared to take risks, while ensuring close risk control".

  The Group sees rigorous risk control as part of its responsibility, both to clients and to the financial system as a whole. The bank's decisions on the commitments it makes are reached after a rigorous and concerted process, based on a strong, shared risk culture which pervades all levels of the Group. This is true both for risks linked to lending activities, where loans are granted only after in-depth analysis of the borrower's situation and the project to be financed, and for market risks arising from transactions with clients – these are assessed on a daily basis, tested against stress scenarios, and subject to limits.

  As a strongly diversified Group, both in terms of geography and businesses, BNP Paribas is able to balance risks and their consequences as they materialise. The Group is organised and managed in such a way that any difficulties arising in one business area will not jeopardise another in the Bank;
- The Group's mission and commitments:

  the mission of BNP Paribas is to finance the economy and advise its clients, by supporting them with their projects, their investments, and the management of their savings, guided by strong ethical principles. Through these activities, BNP Paribas wants to have a positive impact on stakeholders and on society, and be one of the most trustworthy players in the sector. BNP Paribas' twelve commitments as a Responsible Bank include in particular the commitment to finance the economy ethically, and the commitments to apply the highest ethical standards and rigorously manage environmental, social, and governance risks (see section 7.2 *Economic Responsibility: financing the economy in an ethical manner*).

SPREADING THE RISK CULTURE

Robust risk management is an integral part of the Bank's principles. A culture of risk management and control has always been one of its top priorities.

BNP Paribas launched the Risk Culture, a Group-wide initiative, giving it the objective of reinforcing the communication of the best practices in risk management.

The Risk Culture is an open structure sponsored by four functions: Compliance, LEGAL, HR, and RISK, designed for the benefit of all staff and intervening on all types of risks to which the Group may be exposed, including credit, market, liquidity, operational, compliance, regulatory, environmental and social risks. Taking an adaptive and participative approach, this initiative has taken over the work of the Risk Academy in terms of clearly extending the scope of conduct and behaviour beyond the transmission of knowledge.

Actions are rolled out in conjunction with operational entities and mainly consist of:

- the dissemination of information and professional development in the area of risk management, by means of conferences and the publication of educational articles or videos;
- the exchange of information and sharing of knowledge among the Bank's different players. In fact, specialists constantly help to expand Risk Culture's documentary resources which can be accessed by employees via a dedicated online platform.

In all its initiatives, Risk Culture promotes the six fundamental risk management practices that are key to developing a robust risk culture. They serve as a reminder to staff about the importance of clearly understanding and anticipating risks with a long-term perspective, being disciplined with risks taken and reporting swiftly and transparently on risk issues.

Lastly, the risk culture is also spread throughout the Group by linking compensation to performance and risk (see chapter 7, section entitled *A competitive compensation policy*), under a system that was strengthened in this area since 2015 for those employees whose decisions entail a significant risk component.

RISK APPETITE

DEFINITION AND OBJECTIVES

The Group does not have a specific risk appetite target, but some risks are inherent to its business and therefore to the achievement of its strategic objectives. It has prepared a Risk Appetite Statement and Risk Appetite Framework, which should be seen as the Group's formal statement of its tolerance to the risks to which it is exposed as it implements its strategy.

The Risk Appetite Statement is approved on a yearly basis by the Board of directors on the proposal of Executive Management. Consistent with the Group's strategy and in light of the environment in which it operates, this document sets out the qualitative risk principles it intends to follow in its business activities, as well as a quantitative mechanism for supervising the Group's risk profile indicators through quantitative metrics and thresholds. This system covers both the quantifiable and non-quantifiable risks to which it is exposed.

The Group's risk appetite is determined by Executive Management, through the various committees it chairs (CCDG, CMRC, Group ALCo, and Capital Committee), which are tasked with managing the Group's different types of risk exposure. The Group's strategic processes, such as budget, capital and liquidity management, are in line with the Risk Appetite Statement. Certain Risk Appetite Statement indicators are included in the budget exercise and their expected values in the budget are cross-checked against the thresholds in the Risk Appetite Statement.

The Group's Risk Appetite Statement reflects the core values of its risk culture. It states that the Group's risk culture and its commitments as a responsible bank are at the heart of its strategy. The Statement reaffirms the Group's mission: to finance the economy, advise its clients, and help to finance their projects, guided by strong ethical principles. The Group's strategy underpinning its risk appetite is founded on the core principles that have guided its development: a balance between business activities to deliver profitability and stability, a customer-focused business model and an integrated banking model to optimise services to customers. This strategy also factors in developments in the banking industry, including the trend towards a digital model, an uncertain macro-economic outlook, marked by a low rates environment, and stringent regulatory constraints.

RISK PRINCIPLES

The risk principles aim to define the types of risk the Group is prepared to accept in support of its business strategy.

They include the following in particular:

- diversification and risk-adjusted profitability:

  the Group seeks to generate sustainable, client-driven, risk adjusted profits. Sustainable profitability will be achieved based on selectivity and controlled evolution of assets, and the pursuit of a diversified business model. Whilst the Group accepts some level of earnings volatility, it remains attentive to contain, at all times, the level of maximum potential losses in an adverse scenario;
- solvency and profitability:

  BNP Paribas has sufficient capital to cope with stress scenarios and to meet regulatory capitalisation standards in force. In the course of serving its clients, BNP Paribas accepts exposure to risks when it earns a proper return over an acceptable timeframe, and when its potential impacts seem acceptable;

- funding and liquidity:

  the Group ensures that the diversification of and balance between its resources and uses of funds correspond to a conservative funding strategy, allowing it to withstand adverse liquidity scenarios. The Group makes sure that it complies with the regulatory liquidity ratios in force;
- credit risk:

  the Group only accepts exposure on customers it knows well, based on comprehensive information, and pays close attention to the structure of the financing it grants. The Group builds and maintains a diversified risk portfolio, avoiding large concentrations (especially on single names, industries and countries) and ensures that it complies with the concentration policies in force;
- market risk:

  the Group manages market risks (interest rates, equities, currencies, commodities) within the following framework:
  - for activities in the capital markets that are customer-focused, BNP Paribas intends to keep its market risk profile in line with this customer-focused business mode,
  - interest rate risk associated with its banking book with the aim of stabilising its results on an ongoing basis to within acceptable limits;
- operational risk:

  the Group aims to protect its customers, employees and shareholders from operational risk. To do so it has developed a risk management infrastructure based on identifying potential risks, strategies to mitigate risk, and actions to raise awareness of these risks. Some specific risks have resulted in the definition of dedicated principles, in particular:
  - non-compliance risk:

    the Group is committed to compliance with all applicable laws and regulations. It undertakes to implement a system to manage the risk of non-compliance, including through special programs dedicated to the most important regulations for its business,
  - Information, Communication and Technology risk:

    the Group endeavours to reduce the risks related to the security of its information through various awareness actions, enhanced supervision of outsourced activities, heightened protection of terminals, incident monitoring, and a technology watch over IT vulnerabilities and attacks;
- insurance activities:

  BNP Paribas Cardif is exposed mainly to credit, underwriting and market risks. The entity closely monitors its exposures and profitability, taking into account its risks and the adequacy of its capital with regard to solvency rules. It endeavours to contain potential losses in adverse scenarios at acceptable levels.
- risk associated with social and environmental responsibility:

  the Group is particularly sensitive to its customers' performance in terms of social and environmental responsibility, believing that this could have a material impact on its customers' risk profile and, consequently, their solvency, in addition to being a major reputational risk. BNP Paribas takes social and environmental risks into consideration when assessing customer-related risks. The Group also tracks these risks as part of the conduct of its business, the conduct of its counterparties' business and of its investments on its own behalf or on behalf of third parties.

SUPERVISION OF RISK PROFILE INDICATORS

The Risk Appetite Statement sets out the indicators that measure the Group's risk profile for its risk exposure categories.

Risk level thresholds are assigned to each metric. When these thresholds are reached, they trigger an established process to inform Executive Management and the Board of directors, and if need be, to implement action plans.

These indicators are monitored quarterly in the risk dashboards presented to the CCIRC.

For example, the following ratios (described in the *Key figures* of section 5.1) are included in the Risk Appetite indicators:

- the CET1 ratio;
- the balance of the breakdown of risk-weighted assets by business line (IFS, DM and CIB);
- the cost of risk on outstanding loans (in annualised basis points);
- the liquidity coverage ratio (LCR).

STRESS TESTING

To ensure dynamic risk supervision and management, the Group has implemented a comprehensive stress testing framework.

STRESS TESTING FRAMEWORK

The stress testing framework forms an integral part of the risk management and financial monitoring system and is used with a threefold objective of forward-looking risk management, planning of regulatory resources and liquidity requirements, and optimisation of the deployment of these resources within the Group, mainly through the Group's and its main entities' ICAAP and ILAAP processes.

Different types of stress tests

There are two types of stress tests:

- regulatory stress tests:

  These involve primarily the stress tests requested by the European Banking Authority, the European Central Banks, or any other supervisory authority.

  The ECB conducted liquidity stress tests on one hundred three European banks in 2019. This exercise consisted of a sensitivity analysis to assess changes in the banks' net liquidity position in different impact scenarios that may arise in the event of the bank experiencing a liquidity crisis. The shocks applied to assets and liabilities were defined using observed liquidity crises that have impacted banks in Europe and were calibrated for different levels of severity. This liquidity stress test showed the comfortable Group's liquidity position.

  In 2018, the EBA and the ECB had conducted EU-wide stress tests of the forty-eight largest European banks. All banks were required to apply certain macroeconomic scenarios and methodological assumptions for comparison purposes. A scenario of severe macroeconomic stress over a period of three consecutive years (the "adverse scenario") was used to test the impact on exposure to credit, market, operational and revenue (rates and commission) risk. This was the first European regulatory year completed under the new IFRS 9 accounting standard, enabling its potential impact in the event of a major macroeconomic crisis to be analysed.

  This stress test demonstrated the Group's ability to withstand the scenario proposed by the European Systemic Risk Board (ESRB) as part of the test. As a reminder, the impact of this major stress scenario on BNP Paribas' capital consisted in reducing the full CET1 ratio by 288 basis points compared with the level at 31 December 2017, restated for calculation changes in the first half of 2018[1], versus an average reduction of -385 basis points across all of the forty-eight European banks tested;

- internal stress tests:

  - stress tests dedicated to risk anticipation: they contribute to the forward-looking risk management, in particular of credit, market, counterparty, interest rates in the banking book, operational, activity and liquidity risks. The results of the transverse stress tests are used, among other purposes, to formulate the Bank's risk appetite and periodically measure its risk profile. They are periodically submitted to Group Executive Management as well as the Board's Internal Control, Risk Management and Compliance Committee (CCIRC) through the quarterly Group risk dashboard. Moreover, *ad hoc* stress testing is performed, when appropriate, within Risk & Development Committees, portfolio reviews or Country Strategic Committees to identify and assess areas of vulnerability within the Group's portfolios,
  - stress tests for the budget process: they contribute to three-year capital planning. Stress tests are carried out annually as part of the budget process and are included in the ICAAP and the ILAAP. They are reviewed at divisional and business line level before being consolidated at Group level to provide a comprehensive view of the impact on the Bank's capital, liquidity and earnings.

    The purpose of stress testing in the budget process is to assess the impact of an adverse macroeconomic scenario on the Group and its activities. These stress tests are part of the yearly budget process which is run on the basis of baseline and adverse scenarios.

    The impact of the adverse scenario is measured on profil and loss (revenues, cost of risk, etc.), balance-sheet, risk-weighted assets, and capital.

    The calculated final output is a Group stressed solvency ratio, as well as possible adjustment measures. The scenarios used, the outcomes of the stress tests and the proposed possible adjustment measures (such as reducing exposures to a sub-segment or changes in funding or liquidity policies, etc.) are included in the budget synthesis report presented to the Group Executive Management at the end of the budget process. In addition, in the Group's ICAAP, its solvency can be analysed in adverse scenarios other than an adverse budget scenario, defined by risk topics occasionally identified by the Group,
  - reverse stress tests: they were conducted as part of the Bank's recovery and resolution plan and ICAAP. Reverse stress tests consist of identifying scenarios likely to result in a drop in the Bank's solvency ratios to below levels set in advance in line with the methods of use in question. These exercises enable any areas where the Bank is fragile in terms of changes in certain risk factors to be detected and facilitate in-depth analyses of the remedial actions that could be implemented by business lines or Group-wide.

Governance and implementation

This framework is based on a well-defined governance, with responsibilities shared between the Group and operational entities in order to encourage operational integration and relevance. Since 2017, the Group has set up a Stress Testing and Extended Planning (STEP) programme serving both the Group and its subsidiaries and business lines.

(1) Relating to the entry into force of IFRS 9, to the deduction from CET1 capital of irrevocable payment commitments (IPC) and to risk-weighted assets associated with operational risk in advanced measurement approach which have been raised to the level of the standardised approach.

The aim of the STEP programme is continue to respond effectively to the various regulatory stress tests, such as the EBA and ECB stress test carried out in 2018, and to develop internal stress test practices required for proper risk management and Group resource planning.

Group Finance, RISK and ALM Treasury have created a shared team – Stress Testing and Financial Synthesis ("STFS"), responsible for implementing the STEP programme and its deployment across the Group's entities and activities.

The STFS team is responsible in particular for:

- the definition and the implementation of the Group's target structure in terms of stress testing while covering the associated organisational issues, modelisation, IT systems and governance;
- the performance of all of the Group's stress testing exercises, relying in particular on existing teams within RISK and Group Finance;
- the support of the stress test initiatives of the Group's business lines and legal entities in order to ensure overall consistency and streamline procedures;
- the management of the Group's financial synthesis and its adaptation to the challenges of SREP.

Stress test methodologies are tailored to the main categories of risk and subject to independent review.

Stress tests may be run at Group, business line or portfolio level, dedicated to one or more risk types and on a more or less large number of variables depending on the pursued objective. Where appropriate, the results of quantitative models may be adjusted on the basis of expert judgement.

Since its creation, the Group's stress testing framework has evolved continuously in order to integrate the most recent developments in stress tests, whether in terms of methodologies or improved operational integration in the Group's management processes. The stress test framework by type of risks is detailed in sections 5.4 *Credit risk*, 5.6 *Counterparty credit risk* and 5.7 *Market risk*.

INTERNAL STRESS TEST SCENARIO DEFINITION

In stress testing exercises, it is common practice to distinguish baseline scenario and adverse scenarios. A macroeconomic scenario is typically a set of macroeconomic and macrofinancial variables (GDP and its components, inflation, employment and unemployment, interest and exchange rates, stock prices, commodity prices, etc.) values projected over a given future period of time.

Baseline scenario

The baseline scenario is considered as the most likely scenario over the projection horizon. The baseline scenario is constructed by Group Economic Research in collaboration with various functions or business lines possessing a specific expertise, in particular:

- Group ALM Treasury for interest rates;
- Wealth Management for equity indices;
- BNP Paribas Real Estate regarding commercial real estate;
- local economists when regional expertise is required;
- RISK for coordination and overall consistency of the scenario.

The global scenario is made up of regional and national scenarios (euro zone, France, Italy, Belgium, Spain, Germany, United Kingdom, Poland, Turkey, United States, Japan, China, India, Russia, etc.) consistent with each other.

Adverse scenario

An adverse scenario describes one or several potential shocks to the economic and financial environment – *i.e.* the materialisation of one or several risks to the baseline scenario – over the projection horizon. An adverse scenario is thus always designed in relation to a baseline scenario, and the shocks associated with the adverse scenario are translated in the set of macroeconomic and financial variables listed above as deviations from their value in the baseline scenario. The adverse scenario is constructed by RISK with the benefit of the expertise of the same team from Group functions or business lines used for the baseline scenario.

Construction of scenarios

Adverse scenarios are revised quarterly by RISK for a review of the Bank's risk appetite metrics and credit provision calculations within the framework of IFRS 9.

They are approved (together with the baseline scenario) by the Group Executive Management in June and September as part of the Group's budget process. For the other two quarterly exercises in March and December, scenarios are approved jointly by the Group Chief Risk Officer and the Group Chief Financial Officer.

The scenarios are then used to calculate expected losses (or profit and loss impact in the case of market risks) over the year for all Group portfolios:

- for portfolios exposed to credit or counterparty risk and for the equity portfolio of the banking book: this calculation measures the impact of the scenario on the cost of risk and risk-weighted assets due to the deterioration of the portfolio quality resulting from the macroeconomic scenario, or adverse moves in equity prices. Credit risk stress tests are performed on the Bank's entire portfolio for all regions and all prudential portfolios, namely Retail, Corporates and Institutions;
- for market portfolios: the changes in value and their profit and loss impact are calculated by simulating a one-time shock, which is consistent with the overall scenario.

The above calculations and related methodologies for stress tests on credit and market risks are coordinated centrally at Group level by STFS team. They also involve various teams of experts at Group and territory's levels in their implementation and design.

Lastly, in an adverse budget scenario, risks appertaining to the Group and its business activities and not forming part of the adverse macroeconomic scenario are added. They are identified and quantified either by the Group's businesses or centrally for those likely to impact the Group as a whole.

5.4 Credit risk

Credit risk is the consequence resulting from the likelihood that a borrower or counterparty will fail to meet its obligations in accordance with agreed terms. The probability of default and the expected recovery on the loan or receivable in the event of default are key components of the credit quality assessment.

EXPOSURE TO CREDIT RISK

The following table shows the gross exposure of all of the BNP Paribas Group's assets exposed to credit risk. The banking book securitisation positions as well as derivatives and repurchase agreements exposed to counterparty risk are excluded from this section and presented in section 5.5 and 5.6, respectively.

In accordance with the EBA's guidelines published in December 2016 on the revised Pillar 3, equity exposures under the standardised approach and using the simple weighting method are included in this section.

The main differences between the carrying amounts of the prudential balance sheet and the risk exposure amounts used for regulatory purposes are presented in Table 12 in the *Scope of Application* section of section 5.2.

These gross exposure amounts do not take into account guarantee and collateral received by the Group in its normal credit risk management operations (see section *Credit risk mitigation techniques*).

➤ TABLE 24: CREDIT RISK EXPOSURE BY ASSET CLASS AND APPROACH

Exposure *In millions of euros*	31 December 2019				31 December 2018				Variation	
	IRB approach	Standardised approach(*)	Simple weighting method	Total	IRB approach	Standardised approach(*)	Simple weighting method	Total	Total	Total – excluding foreign exchange effect
Central governments and central banks	270,355	41,454	-	311,809	284,811	40,579	-	325,390	(13,580)	(15,948)
Corporates	553,272	144,388	-	697,660	504,405	146,722	-	651,127	46,533	39,415
Institutions(**)	58,137	23,266	-	81,403	46,859	23,490	-	70,350	11,054	10,405
Retail	273,493	187,116	-	460,609	263,561	186,027	-	449,589	11,021	10,056
Equity	-	997	16,887	17,884	-	1,262	12,959	14,220	3,663	3,644
Other items(***)	459	28,314	-	28,773	833	32,013	-	32,846	(4,073)	(4,238)
TOTAL	**1,155,716**	**425,536**	**16,887**	**1,598,139**	**1,100,469**	**430,094**	**12,959**	**1,543,521**	**54,617**	**43,334**

(*) In the following paragraphs, standardised credit risk exposures are reported according to the regulatory standardised classification.
(**) Institutions asset class comprises credit institutions and investment firms, including those recognised in other countries. It also includes some exposures to regional and local authorities, public sector agencies and multilateral development banks that are not treated as central government authorities.
(***) Other non credit-obligation assets include tangible assets, accrued income and residual values.

Exposure related to loan acquisitions on the secondary market in 2019 only accounts for a marginal amount.

TRENDS IN CREDIT RISK EXPOSURE

The EUR 44 billion increase in credit risk exposure (excluding Other items and Equities), excluding foreign exchange effects, in 2019, is due mainly to the Bank's current business activity. Currency effects had a significant influence on the increased exposure (+EUR 11 billion) under the combined effect of the appreciation of the U.S. dollar (+EUR 7 billion) and the pound sterling (+EUR 3 billion). Excluding these currency effects, the main changes by exposure class are the following:

- the EUR 39 billion increase in corporate exposures was driven mainly by CIB (+EUR 31 billion), primarily in Europe (+EUR 20 billion) and to a lesser extent in Asia and the United States, and by Domestic Markets (+EUR 10 billion), mainly in France;
- the EUR 10 billion increase in Retail exposures stemmed, on the one hand, from the increase in mortgage loans in France, Belgium and Luxembourg and, on the other, from the expansion of Personal Finance partnerships.

APPROACHES USED TO CALCULATE CAPITAL REQUIREMENTS

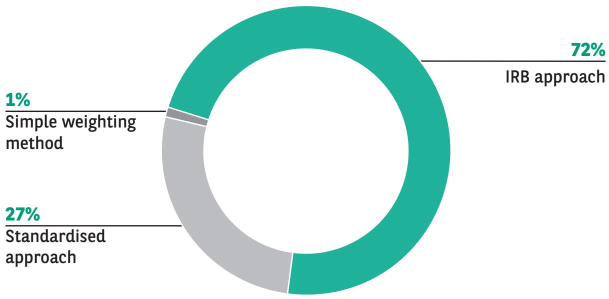
BNP Paribas has opted for the most advanced approaches allowed under Basel 3. In accordance with the European Directive and its transposition into French law, in 2007 the supervisor authorised the Group to use internal models to calculate capital requirements starting on 1 January 2008.

For credit risk, the share of exposures under the IRBA approach is 72% as at 31 December 2019, compared with 71% 31 December 2018. This significant scope includes in particular Corporate and Institutional Banking (CIB), French Retail Banking (FRB), BNL SpA, a part of the BNP Paribas Personal Finance business (consumer loan book) and the entities BNP Paribas Fortis and BGL BNP Paribas. The main models used by the Fortis Group, which prior to its acquisition had been authorised by its banking supervisor to use the advanced approach, converged to Group methodologies (with the exception of those concerning retail customers). The IRBA scope nevertheless excludes certain entities such as those of the BancWest sub-group and subsidiaries in emerging countries.

Within the scope of equity exposures, the Group has mainly opted for the simple weighting method.

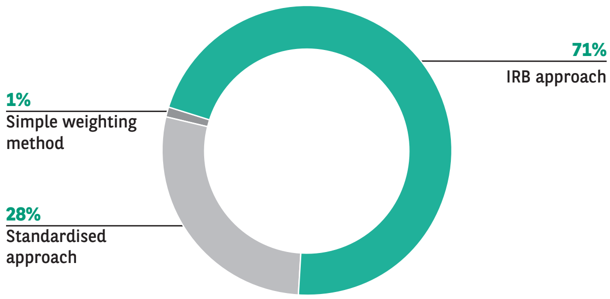
➤ FIGURE 6: CREDIT RISK EXPOSURE BY APPROACH

at 31 December 2019



Total : EUR 1,598 billion

at 31 December 2018



Total : EUR 1,544 billion

CREDIT RISK MANAGEMENT POLICY

CREDIT POLICIES [Audited]

The Bank's lending activities are governed by the Global Credit Policy. It applies to all Group activities that generate credit or counterparty risk. The Global Credit Policy provides general principles (including the risk assessment and decision-making process, adherence to the highest standards of compliance and ethics) applicable to all credit risk, as well as specific principles applicable to country risk, economic sector risks, clients selection and the transaction structures. It is supplemented by specific policies tailored to each type of business or counterparty.

These policies are regularly updated in line with developments in the credit environment in which the Group operates.

Corporate Social and Environmental Responsibility (CSR)

Since 2012, clauses on Corporate Social and Environmental Responsibility (CSR) are included in specific new credit policies or when existing policies are updated.

Furthermore, sectoral policies and financing exclusions for certain sectors presenting significant Environmental, Social and Governance (ESG) challenges (described in the Commitment 3 section of chapter 7 : *Systematic integration and management of Environmental, Social and Governance risks (ESG)*) have also been implemented.

The Group is also taking a number of steps to improve the incorporation of ESG risks, especially climate change-related risks, in its credit risk system. Within the context of the application of the Duty of Vigilance law, in addition to sectoral policies and financing exclusions, the Group also decided to strengthen the ESG assessment of its clients to make it more systematic and to better understand the ESG risk profile of all its corporate clients.

INDIVIDUAL DECISION-MAKING PROCEDURES [Audited]

A system of discretionary lending limits has been established, under which all lending decisions must be approved by managers or representatives of the sales teams, with the approval of a formally designated member of RISK. Approvals are systematically evidenced in writing, either by means of a signed approval form or in the minutes of formal Credit Committee meetings. Discretionary lending limits correspond to aggregate commitments by business group and vary according to internal credit ratings and the specific nature of the business concerned. All transactions proposed are subject to a detailed review of the borrower's current and future position. The review, conducted as soon as the transaction is arranged and updated at least on an annual basis, is designed to ensure the Group has comprehensive information about the borrower and can monitor any potential changes in its situation. Certain types of lending commitments, such as loans to financial institutions, sovereign loans and loans to customers operating in certain industries that are exposed to cyclical risks or to a rapid pace of change, are subject to specific authorisation procedures and require the sign-off of an industry expert or designated specialist. In Retail Banking, simplified procedures are applied, based on statistical decision-making aids.

Loan applications must comply with the Bank's Global Credit Policy and any relevant specific policies. Material exceptions undergo a special approval process. Before making any commitments, BNP Paribas carries out an in-depth review of any known development plans of the borrower, and ensures that it has thorough knowledge of all the structural aspects of the borrower's operations and that adequate monitoring will be possible.

The *Comité de Crédit de Direction Générale* (CCDG) is the highest level Group committee for all decisions related to credit and counterparty risk. It is chaired by a member of Executive Management or, by delegation, a Deputy Chief Operating Officer or the Chief Risk Officer (see *Governance* in section 5.3 *Risk Management*). It has ultimate decision-making authority for all loan applications for amounts in excess of individual discretionary lending limits or applications that would not comply with the Global Credit Policy.

MONITORING AND PORTFOLIO MANAGEMENT PROCEDURES [Audited]

Monitoring exposures

A comprehensive risk monitoring system is organised around control units, which are responsible for ensuring that lending commitments comply with the loan approval decision, that credit risk reporting data are reliable and that risks accepted by the Bank are effectively monitored. Daily exception reports are produced and various early warning tools are used to identify early the deterioration of credit risks. The various monitoring levels are carried out under the supervision of RISK. Non-performing loans or those placed under credit watch (see *Exposures, provisions and cost of risk*) are overseen more closely via dedicated quarterly Committee meetings (see the *Governance* part of section 5.3 *Risk management*). The most sensitive loans are reviewed at an Executive Management level. To supplement this mechanism, the General Management Doubtful Committee meets on a monthly basis to determine individual provisions for doubtful loans based on expected financial flows.

The responsibilities of the control teams include the monitoring of exposures against approved limits, covenants, and guarantees. This allows the identification of any signs of deterioration against the risk profile approved by the Credit Committee. Control teams flag up (to the RISK teams and business units) any cases that fail to comply with Credit Committee decisions and oversee their resolution. In some cases, a specific alert is sent to the senior management of RISK and of the relevant business unit. These are mainly where exceptions remain unresolved and/or where there are serious indications of deterioration in the risk profile compared with that approved by the Credit Committee.

Furthermore, since 2018 the General Credit Policy has included specific checks to be conducted for loans granted to clients presenting high leverage ratios, in accordance with European Central Bank guidelines.

Overall portfolio management and monitoring

The selection and careful evaluation of individual exposures are supported by a reporting system based on more aggregated portfolio levels in terms of division/business line, country, industry, business/product.

The overall portfolio management policy, including concentration of risk by single name, industry and country, is based on this reporting system and Group Risk Committees review all reports and analyses produced:

- risk concentration by country is managed through country risk limits that are set at the appropriate level of delegated authority for each country. The Group, which is naturally present in most economically active areas endeavours to avoid excessive concentrations of risk in countries with weak economic or unstable political structures or which economic position has been undermined. Country envelope limits are reviewed at least once a year, and quarterly reports are drawn up on their utilisation;
- the Group closely monitors individual concentrations, in particular on business groups or sovereign debts. The largest exposures to groups of corporate clients, financial institutions and sovereign debt are reported in the quarterly risk report to the CCIRC. BNP Paribas has also implemented concentration policies on exposures to corporate clients and financial institutions. These policies are described in the *Credit risk diversification* section (section 5.4);
- regular reviews are carried out of portfolios in certain industries, either because of the magnitude of the Group's exposure to the sector or because of sector-specific risks, such as the cyclical nature of the industry or rapid technological developments. In conducting these reviews, the Group draws on the expertise of the relevant business lines and independent industry specialists working in RISK (Industry and Sector Studies). These reviews provide Executive Management, and if appropriate the CCIRC, with an overview of the Group's exposure to the sector under consideration, and assist it to decide on strategic guidelines. As an illustration, in 2019, an internal portfolio review was undertaken on the Metal & Mining and the Oil & Gas sectors (see the paragraph on *Industry Diversification* in this section). In addition, the Group also monitors certain sectors on a regular basis such as, for example, commercial or residential real estate.

Stress tests assess portfolio vulnerabilities by measuring the impact of various adverse scenarios. They are conducted on a quarterly basis on the entire portfolio and on an *ad hoc* basis on sub-portfolios to identify any concentrations. They help to ensure that the Bank's credit risk exposure is in line with its risk appetite.

Lastly, BNP Paribas may use credit risk transfer instruments, such as securitisation programmes, credit derivatives or credit insurance, to mitigate individual risks, reduce portfolio concentration or cap potential losses arising from adverse scenarios.

IMPAIRMENT VALUATION PROCEDURES [Audited]

The Group applied the impairment procedures described below for all loans subject to impairment (see note 1.e.5):

- impairment valuation procedure for performing loans:

  A loss allowance for loans in stage 1 or stage 2 is constituted by each operating division based on an estimation of expected credit losses. This is determined on a quarterly basis during a Committee meeting attended by the Chief Financial Officer and Chief Risk Officer of each operating division. Estimations of expected credit losses result from the default risk in the coming twelve months for financial instruments whose credit risk has not significantly increased since initial recognition (stage 1) or upon maturity for unimpaired loans whose credit risk has significantly increased since initial recognition (stage 2). A tool used by most of the Group's business lines enables simulations to be performed based on the parameters of the rating system described below;
- impairment valuation procedure for defaulted exposures:

  RISK reviews corporate, bank and sovereign loans in default at monthly intervals to determine the amount of any decrease in value to be recognised, either by reducing the carrying amount or by recording a provision for impairment, in accordance with applicable accounting standards (see chapter 4 note 1.e.5 *Impairment of financial assets at amortised cost and debt instruments at fair value through shareholders' equity*). The Group uses various methodologies (expert opinions, statistical calculations) for defaulted exposures to retail customers. These impairments are referred to as stage 3. The amount of this impairment loss is based on the present value of probable recovered net cash flows, including from the possible realisation of the collateral held.

RATING SYSTEM [Audited]

Each counterparty is rated internally by the Group using uniform principles, regardless of the approach used to calculate regulatory capital requirements.

The Bank has a comprehensive internal rating system compliant with regulatory requirements regarding capital adequacy. A periodic assessment and control process has been deployed within the Bank to ensure that the system is appropriate and correctly implemented. The system was formally validated by the supervisor in December 2007 and is inspected on a regular basis.

For loans to institutions, corporates, sovereigns and specialised lendings, the system is based on three parameters: the counterparty's probability of default (PD) expressed via a rating, the global recovery rate (GRR) or its complement, loss given default (LGD), which depends on the structure of the transaction, and the credit conversion factor (CCF) which estimates the off-balance sheet exposure at risk.

There are twelve counterparty ratings. Ten cover performing clients with credit assessments ranging from "excellent" to "very concerning", and two relate to clients classified as in default, as per the definition by the banking supervisor.

Confirmation or amendments to the probability of default parameters and GRR applicable to each transaction are reviewed at least once a year as part of the loan approval process or annual credit review. These are based on the combined expertise of business line staff and, as a second look, the RISK representatives (who have the final say in case of disagreement). It uses appropriate tools including analysis aids and credit scoring systems. The decision to use these tools and the choice of technique depends on the nature of the risk.

For retail counterparties, the system is also based on three parameters: Probability of Default (PD), the Global Recovery Rate (GRR) and the Credit Conversion Factor (CCF). On the other hand, rating methods are applied automatically to determine the loan parameters.

Internal estimates of risk parameters are used in the Bank's day-to-day management in line with regulation recommendations. Thus apart from calculating capital requirements, they are used for example when setting delegated limits, granting new loans or reviewing existing loans to measure profitability, determine stage 1 and stage 2 impairment and for book analyses.

➤ TABLE 25: INDICATIVE MAPPING OF INTERNAL COUNTERPARTY RATING WITH AGENCY RATING SCALE AND AVERAGE EXPECTED PD

	Internal rating BNP Paribas	LT Issuer/ Unsecured issuer's ratings S&P/Fitch	Average expected PD
Investment Grade	1+	AAA	0.01%
	1	AA+	0.01%
	1-	AA	0.01%
	2+	AA-	0.02%
	2	A+/A	0.03%
	2-	A-	0.04%
	3+/3/3-	BBB+	0.06% to 0.10%
	4+/4/4-	BBB	0.13% to 0.21%
	5+/5/5-	BBB-	0.26% to 0.48%
Non Investment Grade	6+	BB+	0.69%
	6/6-	BB	1.00% to 1.46%
	7+/7	BB-	2.11% to 3.07%
	7-	B+	4.01%
	8+/8/8-	B	5.23% to 8.06%
	9+/9/9-	B-	9.53% to 13.32%
	10+	CCC	15.75%
	10	CC	18.62%
	10-	C	21.81%
Default	11	D	100.00%
	12	D	100.00%

The Group has developed an indicative equivalence between the Bank's internal ratings and the long-term issuer ratings assigned by the major rating agencies. However, the Bank has a much broader clientele than just those counterparties rated by an external rating agency. An indicative equivalence is not relevant in retail banking. It is used when the internal ratings are assigned or reviewed in order to identify any differences between the Bank's assessment of a borrower's probability of default and that of one or more of the rating agencies. However, the internal ratings do not aim to reproduce or even approximate the external ratings. There are significant variances in both directions within the portfolio. Some counterparties rated 6 or 7 by BNP Paribas could be considered Investment Grade by the rating agencies.

For further details, see the sections *Internal rating system – sovereign, financial institution, corporate and specialised financing portfolios* and *Internal rating system specific to retail customers*.

CREDIT RISK STRESS TESTING

Quantitative models have been developed and are used to connect credit risk and rating migration parameters with macroeconomic and financial variables projected in stress testing scenarios (see section 5.3 *Stress testing*), for historical data as well as the relevant forecast period.

The quality of the methods used is guaranteed by:

- strict governance in terms of the separation of duties and responsibilities;
- a review of existing systems (models, methodologies, tools) by an independent entity;
- periodic evaluation of the effectiveness and pertinence of the system as a whole.

This governance is based on internal policies and procedures, the supervision of the Credit Risk Stress Testing Committees by business line and the integration of the stress tests within the risk management system.

There is a Group-level credit-risk stress testing policy, approved by the Capital Committee in July 2013. It is used for different types of stress testing (regulatory, periodic and *ad hoc*).

The central stress testing framework is consistent with the structure defined in the EBA guidelines for European stress tests:

- it is based on the parameters used to calculate capital requirements (regulatory EAD, PD and LGD);
- the expected loss conditional to the macroeconomy is used as a measure of the cost of risk resulting from new defaults;
- the stressed cost of risk is supplemented with impacts on stage 1 and 2 provisions and provisions on the outstanding non-performing loans;
- the regulatory capital stress testing is performed on the basis of rating migrations, default events, and the stressed regulatory PD used in calculating regulatory capital requirements.

In the case of the stress of risk-weighted assets, the Loss Given Default is not stressed as it is considered as downturn LGD. In that of stress on the cost of risk, the rate of loss (also known as Point-in-time LGD) can be stressed through a link with macroeconomic and financial variables or with default rates.

Stress testing of credit risk is used in the evaluation of the Group's risk appetite, and more specifically during portfolio reviews.

CREDIT RISK DIVERSIFICATION

The Group's gross exposure to credit risk stands at EUR 1,581 billion at 31 December 2019, compared with EUR 1,531 billion at 31 December 2018. This portfolio, which is analysed below in terms of its diversification, comprises all exposures to credit risk shown in Table 24, excluding equity exposures under the simple weighting method, shown in the section *Credit risk: equities under the simple weighting method*.

These exposure amounts are based on the gross carrying value of the financial assets. They do not include collateral taken by the Group in its normal credit risk management operations (see section *Credit risk mitigation techniques*).

No single counterparty gives rise to an excessive concentration of credit risk, due to the size of the business and the high level of industrial and geographical diversification of the client base. The breakdown of credit risks by industry and by region is presented in the tables hereafter.

This risk is mainly assessed through the monitoring of the indicators shown below.

SINGLE NAME CONCENTRATION

The single name concentration risk of the portfolio is subject to regular monitoring. It is assessed on the basis of the total commitments at client or business group level and is based on two types of monitoring:

Monitoring of large exposures

Regulation (EU) No. 575/2013 (article 395) of 26 June 2013 establishes a limit of 25% of the bank's capital for exposure by business group (after exemptions and taking credit risk mitigation techniques into account).

BNP Paribas is well below the concentration thresholds set by this regulation. The exposure (as defined above) of a client or a group of connected clients never exceeds 10% of the Bank's eligible capital.

Monitoring through individual "single name" concentration policies

The single name concentration risks are part of the Group's concentration policies. They are meant to identify and closely monitor any single business group with an excessive concentration of risk to proactively manage individual concentrations relative to the Group's Risk Appetite Statement.

BREAKDOWN BY ASSET EXPOSURE CLASS

TABLE 26: CREDIT RISK EXPOSURE BY ASSET CLASS AND APPROCH TYPE (EU CRB-B)

Exposure *In millions of euros*	31 December 2019	Average 2019	31 December 2018	Average 2018
Central governments or central banks	270,355	285,451	284,811	300,641
Institutions	58,137	51,191	46,859	46,360
Corporates	553,272	536,442	504,405	504,027
Retail	273,493	270,158	263,561	261,004
Secured by real estate property	*177,757*	*173,731*	*167,907*	*164,666*
of which SME	*11,784*	*11,730*	*11,742*	*11,132*
of which Non-SME	*165,974*	*162,000*	*156,164*	*153,534*
Qualifying revolving	*17,839*	*17,920*	*18,031*	*18,065*
Other retail	*77,897*	*78,507*	*77,624*	*78,273*
of which SME	*28,285*	*28,274*	*28,030*	*28,769*
of which Non-SME	*49,612*	*50,234*	*49,593*	*49,504*
Other items	459	645	833	502
TOTAL IRB APPROACH	**1,155,716**	**1,143,889**	**1,100,469**	**1,112,534**
Central governments or central banks	29,518	28,460	30,673	31,227
Regional governments or local authorities	5,916	6,027	6,892	6,169
Public sector entities	18,176	16,716	14,219	15,099
Multilateral development banks	192	103	120	31
International organisations	9	4	0	650
Institutions	10,813	10,739	11,915	11,553
Corporates	118,520	120,975	120,970	117,457
of which SME	*26,482*	*22,408*	*21,389*	*21,256*
Retail	130,019	131,268	129,143	126,318
of which SME	*31,750*	*30,983*	*29,650*	*29,173*
Exposures secured by mortgages on immovable property	70,732	71,286	69,850	73,185
of which SME	*20,636*	*18,535*	*17,447*	*17,145*
Exposures in default	10,826	11,972	12,632	12,962
Items associated with particular high risk(*)	1,187	1,024	-	-
Exposures in the form of units or shares in collective investment undertakings	533	547	603	641
Equity	782	878	1,063	1,205
Other items	28,314	32,464	32,013	30,807
TOTAL STANDARDISED APPROACH	**425,536**	**432,463**	**430,094**	**427,304**
TOTAL	**1,581,252**	**1,576,352**	**1,530,563**	**1,539,838**

(*) *Immovable property financing exposures whose risk profile may be affected by market conditions.*

5

GEOGRAPHIC DIVERSIFICATION

Country risk is the sum of the risks on all exposures to obligors in the country concerned. It is not the same as sovereign risk, which is the sum of all exposures to the central government and its various branches. Country risk reflects the Bank's exposure to a given economic and political environment, which are taken into consideration when assessing counterparty quality.

The geographic breakdown shown below is based on the counterparty's country of residence.

The geographic breakdown of the portfolios is balanced. In 2019, the Group was particularly attentive to geopolitical risks and the economic performance of emerging countries (see section *Areas of special interest in 2019* in section 5.1).

TABLE 27: CREDIT RISK EXPOSURE BY GEOGRAPHIC REGION (EU CRB-C)

Exposure *In millions of euros*	Europe(*)								
	Total Europe	France	Belgium	Luxembourg	Italy	United Kingdom	Germany	Netherlands	Other European countries
Central governments or central banks	**213,344**	136,533	10,532	8,957	14,721	7,150	11,406	706	23,340
Institutions	**33,308**	8,245	8,255	662	2,695	1,324	5,939	1,812	4,376
Corporates	**379,138**	118,884	61,853	21,038	49,802	44,109	18,620	18,012	46,820
Retail	**273,045**	138,963	78,332	8,004	36,072	123	186	69	11,296
Other items	**459**	15	397	47	-	0	-	0	0
TOTAL IRB APPROACH	**899,293**	**402,640**	**159,369**	**38,709**	**103,289**	**52,706**	**36,151**	**20,599**	**85,831**
Central governments or central banks	**17,427**	4,410	1,767	14	2,755	26	386	5	8,065
Regional governments or local authorities	**4,716**	368	909	-	3,241	8	8	9	172
Public sector entities	**4,007**	711	38	-	2,998	47	18	4	191
Multilateral development banks	**147**	-	-	147	0	-	-	-	-
International organisations	**9**	-	9	-	-	-	-	-	-
Institutions	**7,334**	3,591	287	169	890	425	839	94	1,040
Corporates	**69,761**	21,131	1,782	1,138	8,789	8,755	5,109	1,436	21,622
Retail	**97,383**	15,061	2,921	57	28,401	13,388	18,510	1,106	17,938
Exposures secured by mortgages on immovable property	**36,187**	10,026	1,976	41	1,121	1,358	1,206	6,631	13,829
Exposures in default	**8,233**	1,822	68	70	2,854	451	635	62	2,270
Items associated with particular high risk(**)	**94**	12	-	-	0	-	-	-	82
Exposures in the form of units or shares in collective investment undertakings	**533**	533	-	-	-	-	-	-	-
Equity	**782**	553	-	228	-	-	-	-	-
Other items	**25,452**	13,594	2,028	538	3,623	2,075	2,461	78	1,055
TOTAL STANDARDISED APPROACH	**272,066**	**71,811**	**11,786**	**2,402**	**54,672**	**26,533**	**29,173**	**9,425**	**66,263**
TOTAL	**1,171,359**	**474,451**	**171,155**	**41,111**	**157,961**	**79,239**	**65,324**	**30,024**	**152,094**

(*) Within the scope of the European Union and the European Free Trade Association (EFTA).
(**) Immovable property financing exposures whose risk profile may be affected by market conditions.

												31 December 2019
	Asia Pacific					Rest of the World						
North America	Total Asia Pacific	Japan	North Asia	South-East Asia (ASEAN)	Indian peninsula & Pacific	Total Rest of the World	Turkey	Mediterranean	Gulf States & Africa	Latin America	Other countries	TOTAL
24,568	**26,238**	11,754	6,876	4,233	3,375	**6,206**	0	87	2,940	1,629	1,550	**270,355**
7,867	**10,836**	1,886	6,296	1,375	1,280	**6,125**	1,241	308	2,844	1,489	243	**58,137**
87,298	**50,151**	5,550	15,645	14,110	14,845	**36,685**	2,163	411	10,808	10,790	12,513	**553,272**
130	**86**	4	24	37	20	**232**	5	37	73	17	100	**273,493**
-	**0**	0	-	-	-	**-**	-	-	-	-	-	**459**
119,863	**87,312**	**19,195**	**28,841**	**19,755**	**19,521**	**49,248**	**3,410**	**844**	**16,664**	**13,925**	**14,406**	**1,155,716**
6,055	**102**	51	5	15	32	**5,934**	3,091	1,602	671	43	528	**29,518**
1,016	**0**	-	-	-	0	**184**	184	0	0	-	-	**5,916**
14,005	**21**	-	21	-	-	**143**	10	48	0	-	85	**18,176**
31	**13**	-	-	13	-	**-**	-	-	-	-	-	**192**
-	**-**	-	-	-	-	**-**	-	-	-	-	-	**9**
920	**714**	136	208	42	328	**1,845**	1,187	287	111	124	136	**10,813**
28,361	**6,409**	67	4,432	1,556	354	**13,989**	4,744	5,336	1,823	565	1,522	**118,520**
17,241	**1,023**	5	819	12	186	**14,372**	6,561	1,279	1,774	4,112	647	**130,019**
29,167	**280**	1	156	106	17	**5,098**	3,264	1,507	115	52	161	**70,732**
311	**6**	0	0	2	4	**2,276**	793	926	345	130	82	**10,826**
930	**-**	-	-	-	-	**162**	11	151	0	-	-	**1,187**
-	**-**	-	-	-	-	**-**	-	-	-	-	-	**533**
-	**-**	-	-	-	-	**-**	-	-	-	-	-	**782**
1,666	**176**	42	43	10	81	**1,020**	265	367	173	124	90	**28,314**
99,703	**8,744**	**302**	**5,684**	**1,756**	**1,002**	**45,022**	**20,110**	**11,501**	**5,012**	**5,149**	**3,250**	**425,536**
219,566	**96,056**	**19,497**	**34,525**	**21,511**	**20,523**	**94,270**	**23,520**	**12,345**	**21,676**	**19,074**	**17,656**	**1,581,252**

Exposure *In millions of euros*	Europe(*)								
	Total Europe	France	Belgium	Luxembourg	Italy	United Kingdom	Germany	Netherlands	Other European countries
Central governments or central banks	**233,150**	171,321	10,739	9,855	10,901	6,821	9,536	1,223	12,754
Institutions	**25,907**	6,898	8,531	334	2,049	2,285	1,076	1,088	3,646
Corporates	**343,357**	101,304	64,083	18,753	48,305	39,074	15,084	16,122	40,633
Retail	**263,188**	133,605	74,258	7,171	36,850	155	192	62	10,895
Other items	**833**	423	366	43	-	0	0	0	0
TOTAL IRB APPROACH	**866,436**	**413,552**	**157,977**	**36,156**	**98,105**	**48,335**	**25,888**	**18,495**	**67,928**
Central governments or central banks	**17,526**	5,546	1,916	18	1,762	38	344	8	7,893
Regional governments or local authorities	**4,747**	315	774	-	3,455	13	39	7	145
Public sector entities	**4,098**	504	298	-	3,195	4	63	2	34
Multilateral development banks	**120**	-	-	120	0	-	-	-	-
International organisations	**0**	-	0	0	-	-	-	-	-
Institutions	**8,606**	5,363	274	144	695	404	483	155	1,088
Corporates	**70,320**	21,901	2,066	913	9,352	7,577	4,623	1,722	22,166
Retail	**97,458**	17,585	2,723	51	29,373	11,650	17,842	1,028	17,207
Exposures secured by mortgages on immovable property	**35,674**	10,010	1,262	112	1,139	1,988	1,058	7,275	12,830
Exposures in default	**10,275**	2,410	110	5	4,134	468	543	40	2,566
Exposures in the form of units or shares in collective investment undertakings	**603**	603	-	-	-	-	-	-	-
Equity	**1,063**	685	-	377	-	-	-	-	-
Other items	**29,533**	13,864	2,634	727	5,090	1,824	1,594	435	3,364
TOTAL STANDARDISED APPROACH	**280,023**	**78,787**	**12,055**	**2,468**	**58,194**	**23,966**	**26,590**	**10,671**	**67,292**
TOTAL	**1,146,459**	**492,339**	**170,032**	**38,624**	**156,299**	**72,302**	**52,478**	**29,166**	**135,219**

(*) Within the scope of the European Union and the European Free Trade Association (EFTA).

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North America	Asia Pacific: Total Asia Pacific	Asia Pacific: Japan	Asia Pacific: North Asia	Asia Pacific: South-East Asia (ASEAN)	Asia Pacific: Indian peninsula & Pacific	Rest of the World: Total Rest of the World	Rest of the World: Turkey	Rest of the World: Mediterranean	Rest of the World: Gulf States & Africa	Rest of the World: Latin America	Rest of the World: Other countries	TOTAL
20,313	**25,056**	12,444	5,845	3,431	3,335	**6,292**	1	112	2,830	1,563	1,787	**284,811**
9,728	**7,440**	1,033	3,838	1,141	1,429	**3,784**	1,144	479	1,010	886	264	**46,859**
83,119	**43,813**	4,426	13,381	12,785	13,221	**34,116**	2,096	237	10,537	9,701	11,546	**504,405**
75	**81**	5	24	36	16	**218**	5	33	65	24	91	**263,561**
-	**0**	0	-	-	-	**-**	-	-	-	-	-	**833**
113,234	**76,389**	**17,907**	**23,089**	**17,392**	**18,001**	**44,410**	**3,245**	**861**	**14,442**	**12,174**	**13,687**	**1,100,469**
5,787	**1,475**	1,396	5	3	70	**5,886**	3,454	1,604	509	25	295	**30,673**
1,979	**1**	-	-	-	1	**164**	164	-	0	-	-	**6,892**
10,076	**4**	-	4	-	-	**41**	10	1	0	-	30	**14,219**
0	**0**	-	-	0	-	**-**	-	-	-	-	-	**120**
-	**-**	-	-	-	-	**-**	-	-	-	-	-	**0**
1,290	**604**	41	236	50	278	**1,414**	701	202	180	222	108	**11,915**
28,998	**5,828**	38	3,897	1,384	509	**15,824**	6,057	5,704	1,778	769	1,517	**120,970**
17,800	**1,130**	1	468	7	653	**12,756**	5,792	991	1,550	3,973	450	**129,143**
27,545	**428**	0	344	79	5	**6,203**	4,119	1,787	158	9	130	**69,850**
247	**42**	-	0	1	41	**2,068**	604	846	350	139	129	**12,632**
-	**-**	-	-	-	-	**-**	-	-	-	-	-	**603**
-	**-**	-	-	-	-	**-**	-	-	-	-	-	**1,063**
850	**156**	11	60	15	71	**1,474**	416	380	183	348	146	**32,013**
94,573	**9,668**	**1,487**	**5,015**	**1,539**	**1,627**	**45,830**	**21,316**	**11,514**	**4,708**	**5,486**	**2,806**	**430,094**
207,807	**86,057**	**19,395**	**28,103**	**18,931**	**19,628**	**90,240**	**24,561**	**12,375**	**19,150**	**17,660**	**16,493**	**1,530,563**

INDUSTRY DIVERSIFICATION

➤ TABLE 28: CREDIT RISK EXPOSURE BY INDUSTRY (EU CRB-D)

Exposure *In millions of euros*	Agriculture, Food, Tobacco	Insurance	Chemicals excluding Pharma-ceuticals	Building & Public works	Retail trade	Energy excluding Electricity	Equipment excluding IT Electronic	Finance	Real estate
Central governments or central banks	-	174	-	-	-	-	-	176,684	-
Institutions	20	1	47	55	275	-	50	46,372	121
Corporates	18,974	14,108	12,599	23,489	25,344	24,391	33,629	42,815	64,906
Retail	735	40	60	3,159	4,263	4	647	1,662	14,997
Other items	20	1	1	48	29	0	11	22	31
TOTAL IRB APPROACH	**19,750**	**14,324**	**12,707**	**26,750**	**29,911**	**24,395**	**34,336**	**267,554**	**80,055**
Central governments or central banks	-	-	-	-	-	-	-	7,094	-
Regional governments or local authorities	-	-	-	-	-	-	-	-	-
Public sector entities	-	28	-	1	-	-	-	2,511	1
Multilateral development banks	-	-	-	-	-	-	-	192	-
International organisations	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	-	10,320	-
Corporates	9,108	951	1,573	3,861	10,615	673	8,260	4,382	4,259
Retail	5,583	34	44	2,288	1,330	13	679	363	982
Exposures secured by mortgages on immovable property	3,975	51	99	747	1,551	17	580	187	8,959
Exposures in default	730	3	27	557	312	65	267	40	551
Items associated with particular high risk(***)	-	-	-	25	8	-	-	-	1,151
Exposures in the form of units or shares in collective investment undertakings	-	-	-	-	-	-	-	533	-
Equity	-	-	-	-	-	-	-	-	-
Other items	444	11	20	202	432	19	229	6,777	949
TOTAL STANDARDISED APPROACH	**19,840**	**1,078**	**1,762**	**7,681**	**14,247**	**787**	**10,015**	**32,400**	**16,852**
TOTAL	**39,589**	**15,403**	**14,469**	**34,431**	**44,158**	**25,182**	**44,351**	**299,954**	**96,907**

(*) Including cement, packaging, etc.
(**) Electricity, gas, water, etc.
(***) Immovable property financing exposures whose risk profile may be affected by market conditions.

	31 December 2019											
	Information technologies	Minerals, metals & materials(*)	Wholesale trade	Private individual	Healthcare & Pharmaceuticals	Services to public authorities(**)	Business services	Communication services	Sovereign	Transportation & Storage	Other	TOTAL
	-	-	-	-	13	0	51	-	92,939	-	494	**270,355**
	0	90	183	-	966	1,994	86	3	5,781	620	1,473	**58,137**
	18,841	23,411	35,821	2,155	12,881	34,169	55,939	17,034	120	59,823	32,825	**553,272**
	191	337	1,165	231,883	2,013	68	9,163	19	-	313	2,773	**273,493**
	3	17	37	86	3	13	39	0	0	83	17	**459**
	19,035	**23,854**	**37,205**	**234,124**	**15,875**	**36,244**	**65,278**	**17,056**	**98,840**	**60,839**	**37,583**	**1,155,716**
	-	-	-	-	-	-	9	-	22,415	-	0	**29,518**
	-	0	-	-	-	0	-	-	5,913	3	0	**5,916**
	-	-	-	1	2,341	23	41	-	12,105	46	1,076	**18,176**
	-	-	-	-	-	-	-	-	-	-	-	**192**
	-	-	-	-	-	-	-	-	9	-	-	**9**
	-	-	225	31	-	-	236	-	-	-	-	**10,813**
	4,180	5,625	15,066	15,077	2,206	3,697	10,020	2,069	208	4,649	12,043	**118,520**
	191	424	3,870	105,610	1,410	177	2,340	32	-	1,231	3,419	**130,019**
	214	601	3,446	43,875	1,498	82	1,285	8	-	480	3,078	**70,732**
	47	328	1,149	5,718	72	42	156	14	42	185	521	**10,826**
	-	0	0	-	-	-	2	-	-	-	0	**1,187**
	-	-	-	-	-	-	-	-	-	-	-	**533**
	-	-	-	-	-	-	-	-	-	-	782	**782**
	82	72	930	7,732	45	267	2,642	28	2,176	660	4,598	**28,314**
	4,714	**7,050**	**24,686**	**178,043**	**7,572**	**4,288**	**16,731**	**2,151**	**42,868**	**7,254**	**25,516**	**425,536**
	23,750	**30,905**	**61,891**	**412,167**	**23,447**	**40,532**	**82,009**	**19,207**	**141,708**	**68,093**	**63,099**	**1,581,252**

Exposure *In millions of euros*	Agriculture, Food, Tobacco	Insurance	Chemicals excluding Pharma-ceuticals	Building & Public works	Retail trade	Energy excluding Electricity	Equipment excluding IT Electronic	Finance	Real estate
Central governments or central banks	-	75	-	-	-	-	-	210,272	230
Institutions	0	3	52	54	283	-	-	37,474	77
Corporates	20,437	14,815	14,074	25,133	23,765	21,575	32,214	40,079	57,605
Retail	824	59	69	2,724	4,568	7	720	815	16,365
Other items	17	0	1	37	24	0	10	430	34
TOTAL IRB APPROACH	**21,278**	**14,953**	**14,195**	**27,948**	**28,640**	**21,581**	**32,944**	**289,070**	**74,311**
Central governments or central banks	-	-	-	-	-	-	-	10,419	-
Regional governments or local authorities	-	-	-	-	-	-	-	-	-
Public sector entities	-	82	-	1	-	-	-	2,046	1
Multilateral development banks	-	-	-	-	-	-	-	120	-
International organisations	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	3	10,834	-
Corporates	10,287	817	1,393	3,816	8,879	697	7,553	4,585	6,403
Retail	8,304	17	24	1,251	783	10	432	39	601
Exposures secured by mortgages on immovable property	3,164	51	98	602	1,532	13	607	182	9,580
Exposures in default	806	3	38	692	344	72	395	84	681
Exposures in the form of units or shares in collective investment undertakings	-	-	-	-	-	-	-	603	-
Equity	-	-	-	-	-	-	-	-	-
Other items	525	65	41	201	190	11	961	7,849	907
TOTAL STANDARDISED APPROACH	**23,086**	**1,035**	**1,594**	**6,563**	**11,729**	**803**	**9,951**	**36,761**	**18,173**
TOTAL	**44,364**	**15,988**	**15,789**	**34,511**	**40,369**	**22,384**	**42,895**	**325,831**	**92,484**

(*) *Including cement, packaging, etc.*
(**) *Electricity, gas, water, etc.*

												31 December 2018
	Infor-mation techno-logies	Minerals, metals & materials(*)	Wholesale trade	Private individual	Healthcare & Pharma-ceuticals	Services to public authorities(**)	Business services	Communica-tion services	Sovereign	Transpor-tation & Storage	Other	TOTAL
	-	-	-	-	15	0	5	-	74,186	-	27	**284,811**
	0	88	85	81	914	1,756	49	87	3,752	455	1,649	**46,859**
	18,430	22,968	37,759	1,599	10,653	30,431	43,938	16,998	196	38,310	33,428	**504,405**
	221	364	1,222	221,910	2,051	79	8,972	23	-	344	2,224	**263,561**
	2	14	34	94	3	11	33	0	0	75	12	**833**
	18,654	**23,434**	**39,100**	**223,684**	**13,636**	**32,276**	**52,995**	**17,109**	**78,134**	**39,184**	**37,341**	**1,100,469**
	-	-	-	-	-	-	0	-	20,254	-	0	**30,673**
	-	-	-	-	0	0	1	-	6,885	0	6	**6,892**
	-	-	-	1	2,226	52	15	1	8,579	90	1,124	**14,219**
	-	-	-	-	-	-	0	-	-	-	-	**120**
	-	-	-	-	-	-	0	-	0	-	-	**0**
	-	-	533	-	-	-	546	-	-	-	-	**11,915**
	3,156	5,361	14,525	14,155	2,385	3,570	16,196	1,597	99	4,537	10,960	**120,970**
	101	194	2,734	108,468	955	66	1,516	15	-	1,372	2,262	**129,143**
	200	634	3,913	43,101	1,389	96	1,223	10	-	401	3,052	**69,850**
	62	428	1,131	6,260	54	43	625	23	45	205	641	**12,632**
	-	-	-	-	-	-	0	-	-	-	-	**603**
	-	-	-	-	-	-	-	-	-	-	1,063	**1,063**
	20	67	909	6,915	30	253	5,346	330	1,963	725	4,703	**32,013**
	3,540	**6,685**	**23,745**	**178,900**	**7,040**	**4,079**	**25,468**	**1,976**	**37,826**	**7,331**	**23,811**	**430,094**
	22,193	**30,118**	**62,845**	**402,584**	**20,676**	**36,356**	**78,463**	**19,085**	**115,960**	**46,515**	**61,151**	**1,530,563**

Industry risks are monitored in terms of gross exposure and RWAs, in particular:

- the leveraged finance sector:

  at 31 December 2019, the Group's exposure to Leverage Buy-Out transactions ("LBO") was low at EUR 11.9 billion, or less than 1% of the Group's gross balance sheet and off-balance sheet commitments. These exposures are individually very small with an average amount of EUR 6 million per loan (EUR 17 million on average taking account of all business group exposures), and mainly concern European counterparties.

  Moreover, in accordance with the ECB Guidelines, the Group has put in place a system for monitoring companies whose leverage ratio exceeds the threshold set by the regulator;

- the shipping sector:

  the Shipping sector covers a set of sub-segments with very different dynamics: bulk, oil tankers, container carriers, oil services, and cruise. In 2019, despite the continuing recovery of oil prices, the offshore oil services sub-segment continued to be affected, while limited supply helped the oil tanker segment recover. Cruise was the only sub-segment to experience continued growth.

  In 2019, the shipping finance segment also reacted to the new environmental requirements set to take effect in 2020, with many ships out of commission during the modernisation process.

  Shipping gross exposure, which increased by 12.3% in 2019, was EUR 19.7 billion as at 31 December 2019, *i.e.* 1.2% of the Group's on and off-balance sheet exposures. Doubtful loans represent 5% of Group exposure to the Shipping sector.

The Group remains diversified. No sector makes up more than 11% of total corporate lending or more than 5% of total lending at 31 December 2019.

RISK-WEIGHTED ASSETS

TABLE 29: CREDIT RISK-WEIGHTED ASSETS

RWAs *In millions of euros*	31 December 2019	31 December 2018	Variation
IRB approach	**259,552**	**242,323**	**17,229**
Central governments and central banks	2,984	2,201	783
Corporates	186,710	175,335	11,375
Institutions	9,081	7,184	1,897
Retail	60,599	57,355	3,244
Other items	179	248	(69)
Standardised approach	**210,490**	**220,383**	**(9,893)**
Central governments or central banks	5,962	6,124	(162)
Regional governments or local authorities	809	781	28
Public sector entities	2,223	2,413	(190)
Multilateral development banks	0	-	0
International organisations	0	-	0
Institutions	4,410	4,530	(120)
Corporates	76,063	83,292	(7,229)
Retail	68,010	68,394	(384)
Exposures secured by mortgages on immovable property	26,208	26,082	126
Exposures in default	4,882	5,919	(1,037)
Items associated with particular high risk(*)	1,245	-	1,245
Exposures in the form of units or shares in collective investment undertakings	59	77	(18)
Equity	156	213	(57)
Other items	20,462	22,558	(2,096)
Equity positions under the simple weighting method	**54,189**	**41,146**	**13,043**
Private equity exposures in diversified portfolios	5,224	4,382	842
Listed equity exposures	3,741	3,912	(171)
Other equity exposures	45,224	32,851	12,373
CREDIT RISK	**524,231**	**503,851**	**20,380**

(*) Immovable property financing exposures whose risk profile may be affected by market conditions.

TABLE 30: CREDIT RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER (EU CR8)

	RWAs		Capital Requirements	
In millions of euros	Total	of which IRB approach	Total	of which IRB approach
31 December 2018	**503,851**	**242,323**	**40,308**	**19,386**
Asset size	27,869	15,787	2,230	1,263
Asset quality	(15,738)	(8,240)	(1,259)	(659)
Model update	4,397	4,397	352	352
Methodology and policy	3,361	-	269	-
Acquisitons and disposals	(2,571)	6,478	(206)	518
Currency	3,127	1,661	250	133
Others	(65)	(2,854)	(5)	(228)
31 DECEMBER 2019	**524,231**	**259,552**	**41,939**	**20,764**

Credit risk-weighted assets decreased by EUR 20 billion in 2019, primarily as a result of the following:

- an increase of EUR 28 billion in connection with business activity (net of securitisations), including an increase of EUR 12 billion in CIB, EUR 11 billion in International Financial Services and EUR 4 billion in Domestic Markets;
- a EUR 16 billion improvement in asset quality with, in particular, an improvement in risk parameters;
- an increase of EUR 4 billion relating to the updating of models;
- an increase of EUR 3 billion relating to the implementation of the new IFRS 16 accounting standard starting from 1 January 2019;
- EUR 3 billion related to perimeter effects;
- an increase of EUR 3 billion due to currency effects, particularly with the appreciation of the U.S. dollar and pound sterling.

CREDIT RISK: INTERNAL RATINGS BASED APPROACH (IRBA)

The internal rating system developed by the Group covers the entire Bank. The IRBA framework, validated in December 2007, covers the portfolio described in *Approaches used to calculate capital requirements* in the section entitled *Exposure to credit risk*.

The Group has developed specific internal models adapted for the most common categories of exposure and clients in its loan portfolio. BNP Paribas bases these developments on internal data gathered over long periods. Each of these models is developed and maintained by a specialist team, in conjunction with relevant RISK and business line experts. Moreover, verification is performed to ensure compliance with the floors set by the regulation on these models. The Bank does not use models developed by external suppliers.

Counterparty rating (or the Probability of Default) and the Loss Given Default is determined either using purely statistical models for portfolios with the highest degree of granularity (loans to individuals or to very small enterprises) or a combination of models and expert judgement based on indicative values.

Loss Given Default is defined as the loss that the Bank would suffer in the event of the counterparty's default in times of economic downturn, as required by regulations. For each transaction, it is measured using the recovery rate for a senior unsecured exposure to the counterparty, adjusted for any risk mitigation techniques (collaterals or guarantees). Amounts recoverable against these mitigants are estimated each year using conservative assumptions as well as haircuts calibrated to reflect economic downturn conditions.

The Bank models its own conversion factors on financing commitments by using internal default data. Conversion factors are used to measure the off-balance sheet exposure at risk in the event of a default. This parameter is assigned automatically depending on the transaction type for all portfolios and therefore, is not determined by the Credit Committees.

Internal estimates of risk parameters are used in the Bank's day-to-day management in line with regulation recommendations. Thus, apart from calculating capital requirements, they are used, for example, when setting delegated limits, granting new loans or reviewing existing loans to measure profitability, determining stage 1 and stage 2 impairment and for book analyses.

The breakdown of the main models used by the Group, their characteristics and main exposures covered is presented below.

TABLE 31: MAIN MODELS: PD, LGD AND CCF/EAD

Modelled parameter	Portfolio	Number of models	Model and methodology	Number of years default/loss data	Main asset class
PD	Sovereigns	1	Qualitative	> 10 years	Central governments and central banks
	Banks	1	Quantitative + expert opinion	> 10 years	Institutions
	Insurance	1	Quantitative + expert opinion	> 10 years	Corporate – other
	Regulated funds & Agency arrangements	1	Qualitative	> 10 years	Corporate – other
	Large corporates	2	Quantitative + expert opinion	> 10 years	Corporate – other
	Real Estate non-retail in France	1	Qualitative	> 10 years	Corporate – other
	Project financing	1	Qualitative	> 10 years	Corporate – specialised lending
	Energy and commodity financing	1	Quantitative + expert opinion	> 10 years	Corporate – specialised lending
	Non Retail Rating Global Policy	2	Qualitative	> 10 years	Corporate – other
	French Retail Banking – SME Corporate	1	Quantitative + expert opinion	> 10 years	Corporate – SME
	French Retail Banking – Professionals & Entrepreneurs	11	Quantitative	> 10 years	Retail – other SME
	French Retail Banking – Private life (Individuals & Professionnals)	8	Quantitative	> 10 years	Retail – other non-SME/qualifying Revolving/secured by real estate non-SME
	Personal Finance – France	1	Quantitative	> 10 years	Retail – other non-SME
	Belgian Retail Banking – SME	3	Quantitative + expert opinion	> 10 years	Retail – other/secured by real estate SME
	Belgian Retail Banking – Professionals	1	Quantitative	> 10 years	Retail – other SME/secured by real estate SME
	Belgian Retail Banking – Individuals	1	Quantitative	> 10 years	Retail – Secured by real estate non-SME
	Banca Nazionale del Lavoro – small Corporate	2	Quantitative – logistic regression	> 10 years	Corporate – SME
	Banca Nazionale del Lavoro – Retail individuals	7	Quantitative – logistic regression	> 10 years	Retail – other non-SME
	Banca Nazionale del Lavoro – Professionals and Retail SME	7	Quantitative – logistic regression	> 10 years	Retail – other SME

Modelled parameter	Portfolio	Number of models	Model and methodology	Number of years default/loss data	Main asset class
LGD	Sovereigns	1	Qualitative	> 10 years	Central governments and central banks
	Banks	1	Quantitative – calibrated on internal data	> 10 years	Corporate – other
	Insurance	1	Qualitative	> 10 years	Corporate – other
	Regulated funds & Agency arrangements	1	Qualitative	> 10 years	Corporate – other
	Large corporates	2	Quantitative – calibrated on internal data	> 10 years	Corporate – other
	Real Estate non-retail in France	2	Qualitative – asset valuation haircut	> 10 years	Corporate – other
	Project financing	1	Quantitative – calibrated on internal data	> 10 years	Corporate – specialised lending
	Energy and commodity financing	1	Quantitative – calibrated on internal data	> 10 years	Corporate – specialised lending
	Non Retail Rating Global Policy	1	Qualitative	> 10 years	Corporate – other
	French Retail Banking – SME Corporate	1	Quantitative – calibrated on internal data	> 10 years	Corporate – SME
	French Retail Banking – Professionals & Entrepreneurs	6	Quantitative – calibrated on internal data	> 10 years	Retail – other SME
	French Retail Banking – Private life (Individuals & Professionnals)	5	Quantitative – calibrated on internal data	> 10 years	Retail – other SME/qualifying Revolving/secured by real estate non-SME
	Personal Finance – France	1	Quantitative – calibrated on internal data	> 10 years	Retail – other non-SME
	Belgian Retail Banking – Professionals & SME	1	Quantitative – calibrated on internal data	> 10 years	Retail – other SME/secured by real estate non-SME
	Belgian Retail Banking – Individuals	2	Quantitative – calibrated on internal data	> 10 years	Retail – Secured by real estate non-SME
	Banca Nazionale del Lavoro – Small Corporate	1	Quantitative – calibrated on internal data	> 10 years	Corporate – SME
	Banca Nazionale del Lavoro – Retail Individuals	2	Quantitative – calibrated on internal data	> 10 years	Retail – other non-SME
	Banca Nazionale del Lavoro – Professionals and Retail SME	2	Quantitative – calibrated on internal data	> 10 years	Retail – other SME

Modelled parameter	Portfolio	Number of models	Model and methodology	Number of years default/loss data	Main asset class
CCF/EAD	CCF for corporates, banks and sovereigns	1	Quantitative – calibrated on internal data	> 10 years	Central governments and central banks
	French Retail Banking – Retail	4	Quantitative – calibrated on internal data	> 10 years	Retail
	Personal Finance – France	1	Quantitative – calibrated on internal data	> 10 years	Retail
	Belgian Retail Banking – Professionnals & SME	1	Quantitative – calibrated on internal data	> 10 years	Retail
	Belgian Retail Banking – Individuals	2	Quantitative – calibrated on internal data	> 10 years	Retail
	Banca Nazionale del Lavoro – Retail Individuals	0	CCF = 100%	-	Retail

BACKTESTING

Each of the three credit risk parameters (PD, LGD, CCF/EAD) is backtested and probability of default benchmarked annually to check the system's performance for each of the Bank's business segments. Backtesting consists in comparing estimated and actual outcomes for each parameter.

For the IRBA scope, all ratings, including default ratings 11 and 12, for all counterparties to which the Bank has a credit risk exposure, have been recorded over a long period of time. Likewise, observed losses on defaulted exposures during this period are also archived. Backtesting is performed on the basis of this information for each of the risk inputs, both globally and across the scope of each rating model. These exercises aim to measure overall performance and the performance of each rating method, and in particular, to verify the model's discriminatory power (*i.e.* the less well rated counterparties ought to default more often than the better rated ones), the stability of the rated population as well as the predictive, conservative nature of the parameters. For this purpose, observed losses and default rates are compared with estimated Global Recovery Rates and Probability of default for each rating. The "through the cycle" or "downturn" nature of these ratings and loss rates in the event of default (LGD) is also verified.

For benchmarking work, internal ratings are compared with the external ratings of several agencies based on the mapping between internal and external rating scales. Around 10% of the Group's corporate clients have an external rating and the benchmarking studies reveal a conservative approach to internal ratings.

Performance measurements are also carried out on sub-scopes of homogeneous asset classes for Retail portfolios. If the predictive power or the conservative nature of a model has deteriorated, the model is recalibrated or redeveloped as appropriate. These changes are submitted to the regulator for approval in line with the regulations. Pending implementation of the new model, the bank takes conservative measures to enhance the conservatism of the existing model where necessary.

Backtesting of Loss Given Default is based mainly on analysing recovery cash flows for exposures in default. When the recovery process is closed for a given exposure, all recovered amounts are discounted back to the default date and then compared to the exposure amount. When the recovery process is not closed, the future recoveries are estimated by using either the amount of provisions, or historically calibrated statistical profiles. The recovery rate determined in this way is then compared with the initially forecasted rate one year before the default occurred. As with ratings, recovery rates are analysed on an overall basis and by rating policy and geographical area. Variances are analysed taking into account the marked bimodal distribution of recovery rates.

All of this work is reviewed annually in the Capital Committee (see section 5.2 under *Capital management*). Backtesting is also certified internally by an independent team and the results sent to the Supervisor.

The following two tables present an overview of the performance of models for regulatory risk parameters (PD and LGD) within the context of the Group's IRBA scope, using the following indicators:

- arithmetical average of the PD: average probability of default of performing loans weighted by the number of number of obligors in the portfolio in question;
- historic average default rates: average annual default rate (number of obligors defaulting during a financial year relative to the number of performing obligors at the end of the previous year) observed over a long historical period (see Table 31: *Main models: PD*);
- arithmetical average of the estimated LGD: average rate of loss in the event of default weighted by the number of obligors or by the amount of EAD depending on the portfolio in question;
- arithmetical average of the historic LGD observed: the rate of loss in the event of default observed over a long historical period (see Table 31: *Main models: LGD*).

TABLE 32: BACKTESTING OF PD (EU CR9)

Portfolio	BNP Paribas rating	Long term issuer's credit rating	PD range	2018 Arithmetical average PD	Number of non-defaulted obligors at the beginning of the exercise	Number of defaults among the non defaulted obligors at the beginning of the exercise	Historic average default rates
Sovereigns and public sector entities	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.03%	123	1	0.07%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.27%	84	-	0.44%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	3.57%	52	-	0.25%
	9+ to 10-	B to C	8.76 to < 100%	17.56%	14	-	5.40%
Institutions(*)	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.05%	1,395	-	0.07%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.24%	956	-	0.12%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	2.62%	1,092	-	0.31%
	9+ to 10-	B to C	8.76 to < 100%	14.37%	58	1	1.87%
Large corporates(**)	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.06%	2,499	1	0.05%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.27%	5,324	-	0.14%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	2.72%	7,622	44	0.88%
	9+ to 10-	B to C	8.76 to < 100%	15.28%	436	38	12.09%
Individuals	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.04%	2,894,833	2,414	0.04%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.29%	1,774,701	6,556	0.28%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	2.35%	1,346,671	28,872	2.08%
	9+ to 10-	B to C	8.76 to < 100%	18.83%	107,787	19,595	17.60%
Professionals & SME retail	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.07%	72,873	86	0.07%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.30%	264,616	962	0.28%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	2.89%	370,623	10,830	2.53%
	9+ to 10-	B to C	8.76 to < 100%	24.93%	45,623	9,215	20.88%
SME corporate	1+ to 3-	AAA to BBB+	0.00 to 0.11%	0.08%	930	1	0.09%
	4+ to 5-	BBB to BBB-	0.11 to 0.58%	0.34%	35,165	83	0.25%
	6+ to 8-	BB+ to B+	0.58 to 8.76%	2.77%	63,653	1,069	2.01%
	9+ to 10-	B to C	8.76 to < 100%	18.45%	3,579	468	17.18%

(*) Including the Banks, Insurance and Regulated funds & Agency arrangements portfolios.
(**) Including the Large corporates, Real Estate non-retail in France, Project financing and Energy and commodity financing portfolios.

TABLE 33: BACKTESTING OF LGD

Portfolio	2018	
	Arithmetical average of the estimated LGD	Historic arithmetic average of the observed LGD
Sovereigns and public sector entities	42%	14%
Institutions(*)	36%	26%
Large corporates(**)	38%	26%
Individuals	27%	23%
Professionals and SME retail	29%	27%
SME corporate	37%	33%

(*) Including the Banks, Insurance and Regulated funds & Agency arrangements portfolios.
(**) Including the Large corporates, Real Estate non-retail in France, Project financing and Energy and commodity financing portfolios.

INTERNAL RATING SYSTEM – SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS

The IRBA for sovereigns, financial institutions, corporates and specialised financing portfolios is based on a consistent rating procedure in which RISK has the final say regarding the rating assigned to the counterparty and the Global Recovery Rate (GRR) assigned to transactions. Credit Conversion Factors (CCF) of off-balance sheet transactions are automatically assigned according to counterparty and transaction type (see paragraph *Rating system* in the section *Credit risk management policy*).

The generic process for assigning a rating to each segment is as follows:

- for large corporates and specialised financing, an analysis is carried out by the unit proposing a rating and a Global Recovery Rate to the Credit Committee, using the rating models and tools developed by RISK. The rating and Global Recovery Rate are validated or revised by the RISK representative during the Credit Committee meeting. The Committee decides whether or not to grant or renew a loan and, if applicable, reviews the counterparty rating at least once a year;
- for financial institutions, the analysis is carried out by analysts in the RISK Function. Counterparty ratings and Global Recovery Rates are determined during review committees by geographical area to ensure comparability between similar banks;
- for sovereigns, the ratings are proposed by the Economic Research Department and approved at Country Committee (Rating Committee) meetings which take place several times a year. The Committee comprises members of Executive Management, the RISK Function and the business lines;
- for small and medium-sized companies (other than retail customers), a score is assigned by the RISK analysts.

For each of these sub-portfolios, the risk parameters are measured using a model certified and validated by the RISK teams, based mainly on an analysis of the Bank's historical data. The model is supported as far as possible by Group-wide shared tools to ensure consistent use. The method is supplemented by expert judgement provided it can be justified.

The method for assessing risk parameters is based on a set of common principles, and particularly the "two pairs of eyes" principle which requires at least two people, at least one of whom has no commercial involvement, to give their opinion on each counterparty rating and each transaction Global Recovery Rate.

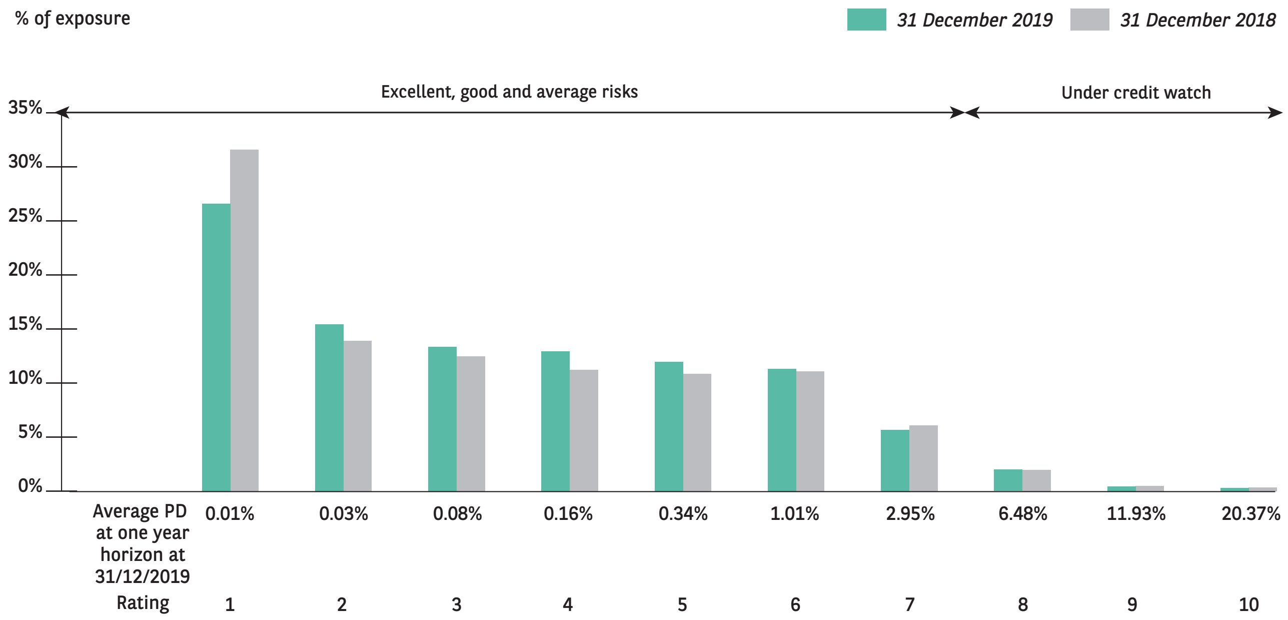
The same definition of default is used consistently throughout the Group for each asset class, in accordance with regulations.

The chart below shows a breakdown by credit rating of performing loans and commitments for the asset classes: central governments and central banks, financial institutions, corporates for all the Group's business lines, measured using the internal ratings based approach.

This exposure represented EUR 870 billion at 31 December 2019 compared with EUR 823 billion at 31 December 2018.

The majority of commitments are towards borrowers rated as good or excellent quality, reflecting the heavy weighting of large multinational groups and financial institutions in the Bank's client base. A significant proportion of commitments to non-investment grade borrowers are highly structured or secured by high quality guarantees implying a high recovery rate in the event of default. They include export financing covered by export credit insurance written by international agencies, project finance, structured finance and transaction financing.

FIGURE 7: IRBA EXPOSURE BY INTERNAL RATING – SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS



SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS

The table below presents the breakdown by PD range of the corporate loans and commitments for the asset classes: Central governments and central banks, Institutions and Corporates for all the Group's business lines using the advanced IRB Approach. This exposure represented EUR 882 billion at 31 December 2019, including EUR 870 billion of non-defaulted loans and EUR 12 billion of defaulted loans, compared with EUR 836 billion at 31 December 2018, including EUR 823 billion of non-defaulted loans and EUR 13 billion of defaulted loans.

The table also gives the weighted averages of the main risk parameters in the Basel framework:

- average probability of default weighted by exposure at default: average PD[1];
- weighted average of Credit Conversion Factor (CCF) for off-balance sheet items: average CCF[2];
- average Loss Given Default weighted by exposure at default: average LGD[3];
- average of residual maturities (in years) weighted by the exposure at default: average maturity.

The average risk weight (average RW[4]) is defined as the ratio between risk-weighted assets and the exposure at default (EAD), resulting from the parameters defined above.

The column "Expected loss" presents the expected loss at a one-year horizon.

(1) Average PD: "Probability of Default" – average probability of default weighted by exposure at default.

(2) Average CCF: "Credit Conversion Factor" – ratio of exposure at default to off-balance sheet exposure.

(3) Average LGD: "Loss Given Default" – average Loss Given Default weighted by exposure at default.

(4) Average RW: "Risk Weight" – average risk weighting.

TABLE 34: IRBA EXPOSURE BY PD SCALE AND ASSET CLASS – SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS (EU CR6)

		31 December 2019												
In millions of euros	PD range	Balance sheet exposure	Off-balance sheet exposure	Total exposure	Average off-balance sheet CCF	EAD	Average PD	Number of obligors	Average LGD	Average residual maturity	RWAs(*)	Average RW(*)	Expected Loss(**)	Provisions(**)
Central governments and central banks	0.00 to < 0.15%	262,902	1,245	264,147	54%	264,185	0.02%	100 to 1,000	1%	2	1,502	1%	1	
	0.15 to < 0.25%	721	1	722	50%	721	0.18%	0 to 100	13%	2	72	10%	0	
	0.25 to < 0.50%	2,278	21	2,299	73%	2,293	0.28%	0 to 100	21%	2	591	26%	1	
	0.50 to < 0.75%	1,088	666	1,753	55%	1,453	0.69%	0 to 100	15%	2	380	26%	2	
	0.75 to < 2.50%	220	17	237	69%	232	1.52%	0 to 100	23%	2	100	43%	1	
	2.50 to < 10.0%	448	101	549	70%	519	6.17%	0 to 100	4%	3	80	15%	1	
	10.0 to < 100%	375	215	590	66%	517	13.36%	0 to 100	9%	3	258	50%	9	
	100% (defaults)	56	3	59	55%	58	100.00%	0 to 100		2	0	0%	9	
SUB-TOTAL		**268,088**	**2,268**	**270,355**	**57%**	**269,977**	**0.08%**		**2%**	**2**	**2,984**	**1%**	**24**	**(27)**
Institutions	0.00 to < 0.15%	29,541	16,464	46,005	48%	37,414	0.05%	1,000 to 10,000	18%	2	4,539	12%	4	
	0.15 to < 0.25%	1,925	1,261	3,185	52%	2,581	0.19%	100 to 1,000	34%	2	882	34%	2	
	0.25 to < 0.50%	3,178	823	4,001	40%	3,509	0.33%	100 to 1,000	31%	2	1,337	38%	4	
	0.50 to < 0.75%	870	410	1,280	33%	1,007	0.64%	100 to 1,000	17%	2	420	42%	1	
	0.75 to < 2.50%	1,695	855	2,551	48%	2,110	1.27%	100 to 1,000	30%	2	1,152	55%	9	
	2.50 to < 10.0%	344	302	646	45%	483	4.10%	100 to 1,000	38%	2	620	128%	7	
	10.0 to < 100%	4	58	62	87%	55	23.78%	0 to 100	34%	1	103	188%	4	
	100% (defaults)	359	47	406	88%	400	100.00%	0 to 100		3	29	7%	320	
SUB-TOTAL		**37,916**	**20,221**	**58,137**	**48%**	**47,559**	**1.06%**		**21%**	**2**	**9,081**	**19%**	**352**	**(359)**
Corporates	0.00 to < 0.15%	62,377	145,447	207,825	52%	137,877	0.07%	10,000 to 20,000	36%	2	29,443	21%	35	
	0.15 to < 0.25%	36,622	33,238	69,860	47%	52,175	0.18%	1,000 to 10,000	35%	2	17,732	34%	33	
	0.25 to < 0.50%	58,019	34,670	92,689	47%	74,568	0.34%	30,000 to 40,000	32%	3	33,752	45%	81	
	0.50 to < 0.75%	20,071	18,819	38,890	34%	26,649	0.68%	20,000 to 30,000	26%	3	13,462	51%	47	
	0.75 to < 2.50%	50,514	25,151	75,665	43%	61,734	1.34%	50,000 to 60,000	25%	3	37,708	61%	209	
	2.50 to < 10.0%	33,746	17,899	51,644	48%	42,409	4.37%	40,000 to 50,000	31%	3	44,978	106%	588	
	10.0 to < 100%	3,083	1,866	4,949	50%	4,025	16.33%	1,000 to 10,000	29%	3	6,119	152%	197	
	100% (defaults)	9,834	1,915	11,749	48%	10,754	100.00%	1,000 to 10,000		2	3,515	33%	5,946	
SUB-TOTAL		**274,266**	**279,006**	**553,272**	**48%**	**410,190**	**3.59%**		**32%**	**3**	**186,710**	**46%**	**7,135**	**(6,789)**
TOTAL		**580,270**	**301,494**	**881,764**	**48%**	**727,726**	**2.12%**		**20%**	**2**	**198,775**	**27%**	**7,511**	**(7,175)**

(*) Add-on included.

(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

		31 December 2018												
In millions of euros	PD range	Balance sheet exposure	Off-balance sheet exposure	Total exposure	Average off-balance sheet CCF	EAD	Average PD	Number of obligors	Average LGD	Average residual maturity	RWAs(*)	Average RW(*)	Expected Loss(**)	Provisions(**)
Central governments and central banks	0.00 to < 0.15%	275,585	1,815	277,400	55%	276,903	0.01%	1,000 to 10,000	1%	2	513	0%	1	
	0.15 to < 0.25%	1,525	18	1,543	52%	1,535	0.19%	0 to 100	16%	3	316	21%	0	
	0.25 to < 0.50%	2,509	81	2,590	63%	2,560	0.30%	0 to 100	22%	2	609	24%	2	
	0.50 to < 0.75%	799	732	1,530	55%	1,202	0.69%	0 to 100	12%	2	234	19%	1	
	0.75 to < 2.50%	163	1	164	64%	163	1.08%	0 to 100	29%	2	92	56%	0	
	2.50 to < 10.0%	717	164	881	64%	822	5.94%	0 to 100	9%	3	246	30%	4	
	10.0 to < 100%	403	197	600	75%	551	14.61%	0 to 100	6%	3	192	35%	7	
	100% (defaults)	101	1	103	55%	102	100.00%	0 to 100		2	0	0%	9	
SUB-TOTAL		**281,801**	**3,009**	**284,811**	**57%**	**283,837**	**0.10%**		**2%**	**2**	**2,201**	**1%**	**23**	**(9)**
Institutions	0.00 to < 0.15%	20,134	15,589	35,723	50%	27,919	0.05%	1,000 to 10,000	17%	2	2,632	9%	3	
	0.15 to < 0.25%	2,126	1,256	3,381	52%	2,778	0.18%	100 to 1,000	37%	2	953	34%	2	
	0.25 to < 0.50%	2,141	703	2,844	43%	2,443	0.34%	1,000 to 10,000	29%	2	976	40%	2	
	0.50 to < 0.75%	1,059	620	1,679	41%	1,317	0.67%	100 to 1,000	17%	2	849	64%	1	
	0.75 to < 2.50%	1,300	792	2,091	43%	1,646	1.28%	100 to 1,000	33%	2	1,089	66%	7	
	2.50 to < 10.0%	384	354	738	45%	545	4.44%	100 to 1,000	31%	2	493	90%	9	
	10.0 to < 100%	22	67	88	84%	78	21.34%	100 to 1,000	45%	2	183	234%	7	
	100% (defaults)	270	46	315	78%	305	100.00%	0 to 100		4	10	3%	206	
SUB-TOTAL		**27,434**	**19,426**	**46,859**	**49%**	**37,030**	**1.09%**		**21%**	**2**	**7,184**	**19%**	**237**	**(250)**
Corporates	0.00 to < 0.15%	56,531	131,721	188,253	52%	125,641	0.07%	10,000 to 20,000	38%	2	25,709	20%	32	
	0.15 to < 0.25%	29,955	30,598	60,553	47%	44,496	0.18%	10,000 to 20,000	35%	2	15,286	34%	28	
	0.25 to < 0.50%	47,249	32,567	79,816	48%	63,185	0.35%	40,000 to 50,000	33%	3	28,955	46%	72	
	0.50 to < 0.75%	15,525	15,420	30,945	32%	20,608	0.68%	20,000 to 30,000	27%	3	12,510	61%	37	
	0.75 to < 2.50%	50,140	27,051	77,192	44%	62,210	1.34%	60,000 to 70,000	28%	3	41,661	67%	233	
	2.50 to < 10.0%	32,532	16,626	49,158	48%	40,655	4.33%	50,000 to 60,000	32%	3	43,644	107%	503	
	10.0 to < 100%	3,186	2,274	5,461	54%	4,422	16.56%	1,000 to 10,000	30%	3	6,949	157%	220	
	100% (defaults)	11,551	1,476	13,028	40%	12,159	100.00%	10,000 to 20,000		2	621	5%	6,907	
SUB-TOTAL		**246,670**	**257,735**	**504,405**	**49%**	**373,376**	**4.29%**		**34%**	**3**	**175,335**	**47%**	**8,032**	**(8,401)**
TOTAL		**555,905**	**280,170**	**836,075**	**49%**	**694,244**	**2.41%**		**20%**	**2**	**184,720**	**27%**	**8,292**	**(8,660)**

(*) Add-on included.

(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

Most of the Group's central government and central bank counterparties are of very high credit quality and based in developed countries, meaning that they have very good internal ratings and very low average Loss Given Default.

The majority of the Group's corporate commitments concerns counterparties of excellent or good quality, reflecting the large part of multinationals in BNP Paribas' customer base. Other exposures are mainly structured transactions or transactions secured by high-quality assets, reflected in their average LGD levels.

On average, the probability of default excluding counterparty default stands at 0.61%. It is 0.99% for Corporates.

➤ TABLE 35: AVERAGE PD AND LGD OF THE CORPORATE ASSET CLASS BY GEOGRAPHIC REGION

	31 December 2019		
In millions of euros	Non-defaulted exposure	Average PD	Average LGD
Europe(*)	365,824	1.03%	32%
of which France	*117,614*	*1.02%*	*35%*
of which Belgium	*60,777*	*1.71%*	*22%*
of which Luxembourg	*18,092*	*0.92%*	*29%*
of which Italy	*46,009*	*1.01%*	*39%*
North America	92,013	0.74%	32%
Asia Pacific	52,468	0.98%	34%
Rest of the World	31,217	1.26%	30%
TOTAL	**541,523**	**0.99%**	**32%**

(*) *Within the European Union and the European Free Trade Association (EFTA).*

	31 December 2018		
In millions of euros	Non-defaulted exposure	Average PD	Average LGD
Europe(*)	328,755	1.10%	34%
of which France	*100,575*	*1.07%*	*37%*
of which Belgium	*62,970*	*1.65%*	*26%*
of which Luxembourg	*16,442*	*0.97%*	*31%*
of which Italy	*42,613*	*1.17%*	*40%*
North America	85,985	0.81%	35%
Asia Pacific	45,829	1.10%	35%
Rest of the World	30,809	1.30%	29%
TOTAL	**491,378**	**1.07%**	**34%**

(*) *Within the European Union and the European Free Trade Association (EFTA).*

INTERNAL RATING SYSTEM SPECIFIC TO RETAIL CUSTOMERS

Retail customers are characterised by a high degree of granularity, small unit volumes and a standard risk profile.

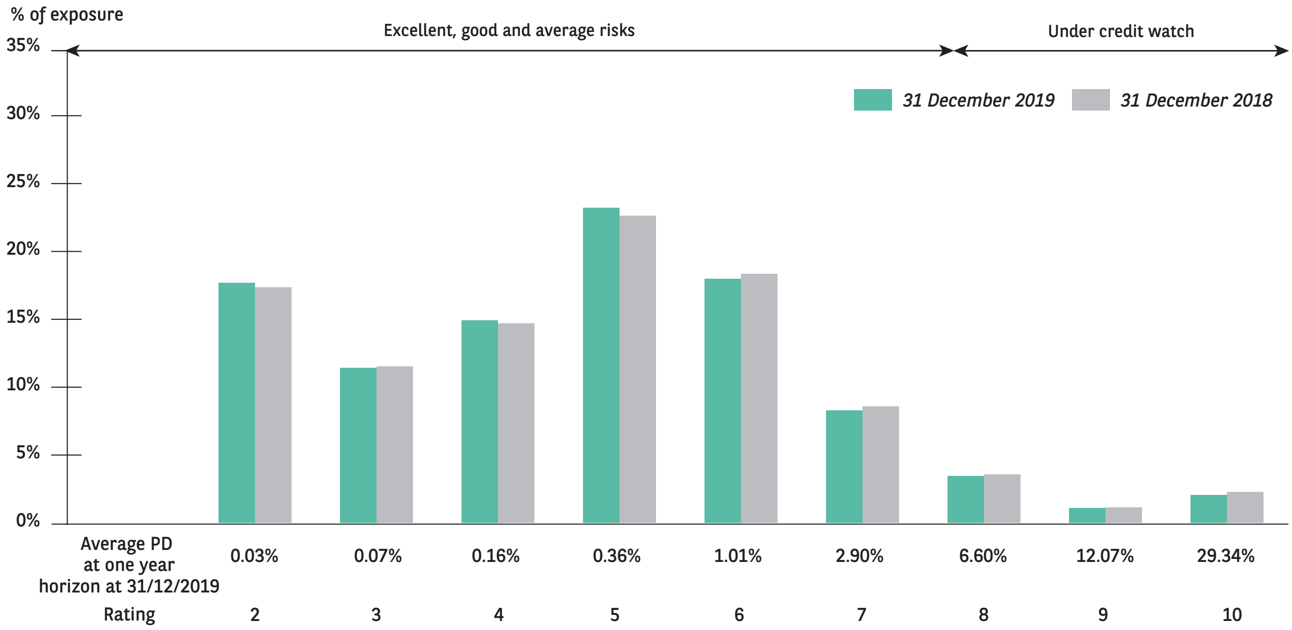
The majority of retail borrowers are assigned a behavioural score which serves as a basis to determine the probability of default and, for each transaction, the global recovery rate (GRR) and exposure at default (EAD). These parameters are calculated every month on the basis of the most up-to-date information. They are supplemented by different scores that are made available to the commercial function. The latter has no involvement in determining risk parameters. These methods are used consistently for all retail customers. The general principles of the rating system are set out in the *Rating System* paragraph in the section *Credit Risk Management Policy*.

Scoring techniques are used to assign retail customers to risk groups presenting the same default risk characteristics. This also applies to the other credit risk parameters: EAD and LGD.

The chart below shows a breakdown by credit rating of performing loans and commitments in the retail book for all the Group's business lines, measured using the internal ratings based approach.

This exposure to performing loans represented EUR 264 billion at 31 December 2019, an increase compared with EUR 253 billion at 31 December 2018.

FIGURE 8: IRBA EXPOSURE BY INTERNAL RATING – RETAIL PORTFOLIO



RETAIL PORTFOLIO

The following table gives the breakdown by PD range of the retail loans and commitments for all of the Group's business lines using the advanced IRB Approach. Total exposure represented EUR 273 billion as at 31 December 2019 compared with EUR 264 billion as at 31 December 2018.

➤ TABLE 36: IRBA EXPOSURE BY INTERNAL RATING AND ASSET CLASS – RETAIL PORTFOLIO (EU CR6)

		31 December 2019											
In millions of euros	PD scale	Balance sheet exposure	Off-balance sheet exposure	Total exposure	Average off-balance sheet CCF	EAD	Average PD	Average LGD	Average residual maturity	RWAs(*)	Average RW(*)	Expected Loss(**)	Provisions(**)
Mortgages	0.00 to < 0.15%	71,905	3,480	75,385	100%	75,392	0.06%	12%	5	1,575	2%	6	
	0.15 to < 0.25%	17,011	737	17,748	99%	17,751	0.18%	13%	5	1,788	10%	4	
	0.25 to < 0.50%	37,090	1,250	38,340	97%	38,330	0.35%	16%	5	4,098	11%	21	
	0.50 to < 0.75%	14,094	756	14,850	74%	14,673	0.64%	15%	5	5,823	40%	15	
	0.75 to < 2.50%	15,718	926	16,644	83%	16,510	1.47%	15%	5	5,009	30%	37	
	2.50 to < 10.0%	7,914	369	8,283	68%	8,183	4.84%	17%	5	4,819	59%	66	
	10.0 to < 100%	2,841	58	2,899	81%	2,890	22.07%	16%	5	2,847	99%	101	
	100% (defaults)	3,591	18	3,608	66%	3,604	100.00%		4	1,650	46%	1,067	
SUB-TOTAL		**170,163**	**7,594**	**177,757**	**93%**	**177,333**	**2.92%**	**14%**	**5**	**27,609**	**16%**	**1,318**	**(1,278)**
Revolving exposures	0.00 to < 0.15%	170	6,715	6,885	90%	6,449	0.08%	65%	1	79	1%	3	
	0.15 to < 0.25%	59	383	442	78%	387	0.18%	75%	1	53	14%	1	
	0.25 to < 0.50%	151	1,563	1,714	60%	1,142	0.33%	64%	1	101	9%	2	
	0.50 to < 0.75%	173	782	955	49%	580	0.61%	65%	1	148	26%	2	
	0.75 to < 2.50%	1,128	1,965	3,093	47%	2,073	1.46%	55%	1	890	43%	16	
	2.50 to < 10.0%	1,661	881	2,542	64%	2,241	5.34%	53%	1	1,362	61%	63	
	10.0 to < 100%	942	206	1,148	69%	1,098	24.38%	54%	1	761	69%	146	
	100% (defaults)	1,024	36	1,059	72%	1,051	100.00%		1	348	33%	764	
SUB-TOTAL		**5,308**	**12,532**	**17,839**	**74%**	**15,022**	**9.86%**	**61%**	**1**	**3,742**	**25%**	**998**	**(1,028)**
Other exposures	0.00 to < 0.15%	9,927	2,805	12,732	85%	12,446	0.07%	41%	3	967	8%	4	
	0.15 to < 0.25%	2,845	969	3,814	87%	3,799	0.20%	39%	3	648	17%	3	
	0.25 to < 0.50%	12,098	2,568	14,666	91%	14,632	0.34%	37%	3	3,378	23%	18	
	0.50 to < 0.75%	7,334	1,871	9,205	64%	8,655	0.64%	37%	3	3,755	43%	21	
	0.75 to < 2.50%	14,070	3,306	17,377	88%	17,149	1.46%	37%	2	8,636	50%	92	
	2.50 to < 10.0%	10,090	1,371	11,462	86%	11,462	4.72%	37%	2	6,772	59%	201	
	10.0 to < 100%	3,559	160	3,719	100%	3,771	25.75%	37%	2	2,716	72%	372	
	100% (defaults)	4,812	109	4,921	88%	4,924	100.00%		2	2,377	48%	3,086	
SUB-TOTAL		**64,736**	**13,160**	**77,897**	**84%**	**76,838**	**8.86%**	**38%**	**3**	**29,248**	**38%**	**3,796**	**(3,889)**
TOTAL		**240,207**	**33,286**	**273,493**	**82%**	**269,194**	**5.01%**	**23%**	**4**	**60,599**	**23%**	**6,112**	**(6,195)**

(*) Add-on included.

(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

		31 December 2018											
In millions of euros	PD scale	Balance sheet exposure	Off-balance sheet exposure	Total exposure	Average off-balance sheet CCF	EAD	Average PD	Average LGD	Average residual maturity	RWAs(*)	Average RW(*)	Expected Loss(**)	Provisions(**)
Mortgages	0.00 to < 0.15%	67,090	2,860	69,950	100%	69,958	0.06%	12%	5	1,416	2%	5	
	0.15 to < 0.25%	15,839	531	16,370	100%	16,372	0.18%	13%	5	945	6%	4	
	0.25 to < 0.50%	34,751	1,002	35,753	95%	35,743	0.36%	16%	5	3,698	10%	20	
	0.50 to < 0.75%	13,211	619	13,829	68%	13,645	0.64%	15%	5	4,746	35%	13	
	0.75 to < 2.50%	16,004	855	16,859	81%	16,730	1.44%	15%	5	4,937	30%	37	
	2.50 to < 10.0%	7,812	299	8,112	66%	8,028	4.85%	17%	5	4,760	59%	65	
	10.0 to < 100%	2,995	69	3,064	70%	3,045	20.77%	16%	5	3,074	101%	102	
	100% (defaults)	3,952	17	3,969	56%	3,964	100.00%		4	1,849	47%	1,204	
SUB-TOTAL		**161,655**	**6,252**	**167,907**	**91%**	**167,485**	**3.29%**	**14%**	**5**	**25,425**	**15%**	**1,450**	**(1,446)**
Revolving exposures	0.00 to < 0.15%	171	6,192	6,363	88%	5,932	0.08%	64%	1	180	3%	3	
	0.15 to < 0.25%	66	973	1,039	84%	921	0.18%	63%	1	62	7%	1	
	0.25 to < 0.50%	151	1,459	1,610	51%	942	0.34%	64%	1	80	9%	2	
	0.50 to < 0.75%	196	712	907	43%	519	0.62%	65%	1	140	27%	2	
	0.75 to < 2.50%	1,202	2,036	3,238	46%	2,177	1.37%	53%	1	795	37%	15	
	2.50 to < 10.0%	1,707	852	2,559	65%	2,279	5.31%	51%	1	1,380	61%	62	
	10.0 to < 100%	964	200	1,164	66%	1,114	24.73%	53%	1	772	69%	148	
	100% (defaults)	1,117	33	1,150	78%	1,144	100.00%		1	358	31%	867	
SUB-TOTAL		**5,573**	**12,458**	**18,031**	**72%**	**15,028**	**10.53%**	**59%**	**1**	**3,768**	**25%**	**1,101**	**(1,080)**
Other exposures	0.00 to < 0.15%	10,281	2,736	13,017	88%	12,785	0.07%	40%	3	972	8%	4	
	0.15 to < 0.25%	2,922	1,116	4,038	86%	3,937	0.19%	41%	2	626	16%	3	
	0.25 to < 0.50%	11,539	2,538	14,078	91%	14,029	0.34%	36%	3	2,789	20%	17	
	0.50 to < 0.75%	6,591	1,568	8,159	61%	7,622	0.63%	37%	3	3,853	51%	18	
	0.75 to < 2.50%	15,205	3,011	18,216	87%	17,988	1.44%	36%	3	8,706	48%	93	
	2.50 to < 10.0%	9,524	1,301	10,825	84%	10,723	4.86%	37%	3	6,414	60%	191	
	10.0 to < 100%	3,684	153	3,837	95%	3,866	26.00%	37%	3	2,772	72%	383	
	100% (defaults)	5,356	98	5,454	88%	5,450	100.00%		2	2,030	37%	3,579	
SUB-TOTAL		**65,102**	**12,522**	**77,624**	**85%**	**76,400**	**9.62%**	**37%**	**3**	**28,163**	**37%**	**4,287**	**(4,158)**
TOTAL		**232,329**	**31,232**	**263,561**	**81%**	**258,913**	**5.58%**	**23%**	**4**	**57,355**	**22%**	**6,837**	**(6,685)**

(*) Add-on included.
(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

Most of the mortgage exposures concern French Retail Banking, Belgian Retail Banking and Luxembourg Retail Banking. Mortgages are issued according to strict and well-defined procedures. Average probability of default on retail clients' non-defaulted loans is 1.50%. The low average Loss Given Default level reflects the guarantees put in place when the mortgages were granted. Since 2013, all credit institutions have implemented an add-on for risk-weighted assets on the Belgian mortgage portfolio at the supervisor's request.

Most of the Revolving exposures and Other exposures relate to consumer loans subsidiaries that have a wider range of customers in terms of credit quality and a lower level of guarantees.

➤ TABLE 37: AVERAGE PD AND LGD OF THE RETAIL PORTFOLIO BY GEOGRAPHIC REGION

	31 December 2019		
In millions of euros	Non-defaulted exposure	Average PD	Average LGD
Europe(*)	263,483	1.50%	23%
of which France	*134,462*	*1.45%*	*24%*
of which Belgium	*77,269*	*1.33%*	*18%*
of which Luxembourg	*7,899*	*0.87%*	*24%*
of which Italy	*32,566*	*1.53%*	*24%*
North America	126	n.s.	n.s.
Asia Pacific	84	n.s.	n.s.
Rest of the World	212	n.s.	n.s.
TOTAL	**263,904**	**1.50%**	**23%**

(*) *Within the European Union and the European Free Trade Association (EFTA).*

	31 December 2018		
In millions of euros	Non-defaulted exposure	Average PD	Average LGD
Europe(*)	252,638	1.56%	23%
of which France	*128,986*	*1.50%*	*24%*
of which Belgium	*73,131*	*1.37%*	*18%*
of which Luxembourg	*7,067*	*0.92%*	*23%*
of which Italy	*32,673*	*1.66%*	*24%*
North America	69	n.s.	n.s.
Asia Pacific	78	n.s.	n.s.
Rest of the World	202	n.s.	n.s.
TOTAL	**252,988**	**1.56%**	**23%**

(*) *Within the European Union and the European Free Trade Association (EFTA).*

CREDIT RISK: STANDARDISED APPROACH

For exposures under the standardised approach, BNP Paribas uses the external ratings from External Credit Assessment Institutions (ECAIs) Standard & Poor's, Moody's, Fitch Ratings, Cerved and Banque de France recognised by the supervisor.

The ratings supplied by Standard & Poor's, Moody's and Fitch Ratings are mainly used for exposures to Central governments and central banks, Regional and local authorities, Public sector entities and Multilateral development banks, Institutions and Corporates. The ratings supplied by the Banque de France are mainly used for corporate exposures and exposures secured by a mortgage on a real estate asset. The ratings supplied by Cerved are mainly used for Corporate exposures.

When there is no directly applicable external rating, the issuer's senior unsecured rating may, if available, be obtained from external databases and used for risk-weighting purposes in some cases.

As at 31 December 2019, standardised approach exposure represented 27% of the BNP Paribas Group's total gross exposures to credit risk, slightly decreasing compared to 28% as of 31 December 2018.

The following table shows a summary of standardised risk-weighted exposures broken down by regulatory asset class. The equity exposures weighted using the standardised approach consist primarily of asset value guarantees given to fund unit holders.

TABLE 38: STANDARDISED CREDIT RISK EXPOSURE BY STANDARD EXPOSURE CLASS (EU CR4)

	31 December 2019					
	Gross exposure		EAD			
In millions of euros	Balance sheet	Off-balance sheet	Balance sheet	Off-balance sheet	RWAs	RWA density
Central governments or central banks	29,487	31	32,018	10	5,962	19%
Regional governments or local authorities	3,098	2,818	3,023	658	809	22%
Public sector entities	16,163	2,013	16,715	415	2,223	13%
Multilateral development banks	192	-	192	-	0	0%
International organisations	9	0	9	0	0	0%
Institutions	9,290	1,523	10,435	677	4,410	40%
Corporates	84,042	34,478	75,962	13,094	76,063	85%
Retail	97,814	32,205	93,373	3,314	68,010	70%
Exposures secured by mortgages on immovable property	63,441	7,292	57,709	1,558	26,208	44%
Exposures in default	10,453	373	4,381	84	4,882	109%
Items associated with particular high risk(*)	504	683	493	340	1,245	149%
Exposures in the form of units or shares in collective investment undertakings	-	533	-	149	59	40%
Equity	-	782	-	156	156	100%
Other items	28,314	-	28,314	-	20,462	72%
TOTAL	**342,805**	**82,730**	**322,624**	**20,455**	**210,490**	**61%**

(*) Immovable property financing exposures whose risk profile may be affected by market conditions.

	31 December 2018					
	Gross exposure		EAD			
In millions of euros	Balance sheet	Off-balance sheet	Balance sheet	Off-balance sheet	RWAs	RWA density
Central governments or central banks	30,663	10	34,956	4	6,124	18%
Regional governments or local authorities	4,130	2,762	4,137	610	781	16%
Public sector entities	12,397	1,823	12,855	386	2,413	18%
Multilateral development banks	120	-	120	-	-	0%
International organisations	-	-	-	-	-	-
Institutions	10,609	1,306	11,582	483	4,530	38%
Corporates	87,591	33,379	80,838	13,182	83,292	89%
Retail	98,592	30,551	93,768	3,151	68,394	71%
Exposures secured by mortgages on immovable property	62,704	7,146	56,321	1,635	26,082	45%
Exposures in default	12,278	354	5,127	115	5,919	113%
Exposures in the form of units or shares in collective investment undertakings	-	603	-	188	77	41%
Equity	-	1,063	-	213	213	100%
Other items	32,013	-	32,013	-	22,558	70%
TOTAL	**351,097**	**78,997**	**331,718**	**19,968**	**220,383**	**63%**

Excluding currency effects, outstanding loans under the standardised approach remained stable in 2019, as a result of the decrease from the change in consolidation method, with some of the Group's unregulated entities now consolidated using the equity method within the prudential scope offset by the increase in outstanding loans at BancWest and TEB.

The following table gives the breakdown by standard asset class, the distribution by risk weight of the loans and commitments in the book for all the Group's business lines using the standardised approach.

Exposure at default was EUR 343 billion at 31 December 2019 compared to EUR 352 billion at 31 December 2018.

TABLE 39: STANDARDISED CREDIT EXPOSURE AT DEFAULT (EU CR5)

Risk weight *In millions of euros*	31 December 2019									
	EAD									
	0%	20%	35%	50%	75%	100%	150%	Other	Total	of which unrated(*)
Central governments or central banks	25,369	237	-	1,015	-	5,406	1	-	32,029	13,841
Regional governments or local authorities	363	3,135	-	0	-	182	-	-	3,681	1,292
Public sector entities	11,436	4,315	-	38	-	1,341	-	-	17,130	11,623
Multilateral development banks	192	0	-	0	-	-	-	-	192	-
International organisations	9	-	-	-	-	-	-	-	9	9
Institutions	749	6,406	-	1,668	-	2,276	13	-	11,111	1,223
Corporates	815	10,377	19	6,994	-	70,015	1,030	-	89,055	61,496
Retail	-	-	0	0	96,687	-	-	-	96,687	96,687
Exposures secured by mortgages on immovable property	-	0	31,887	19,394	5,406	2,560	19	-	59,266	40,744
Exposures in default	-	-	-	-	-	3,632	833	-	4,465	4,372
Items associated with particular high risk(**)	-	-	-	-	-	-	833	-	833	0
Exposures in the form of units or shares in collective investment undertakings	63	34	-	-	-	53	-	-	149	149
Equity	-	-	-	-	-	156	-	-	156	156
Other items	3,857	86	-	58	-	15,646	-	8,667	28,314	25,689
TOTAL	**42,853**	**24,590**	**31,906**	**29,168**	**102,093**	**101,267**	**2,730**	**8,667**	**343,274**	**257,282**

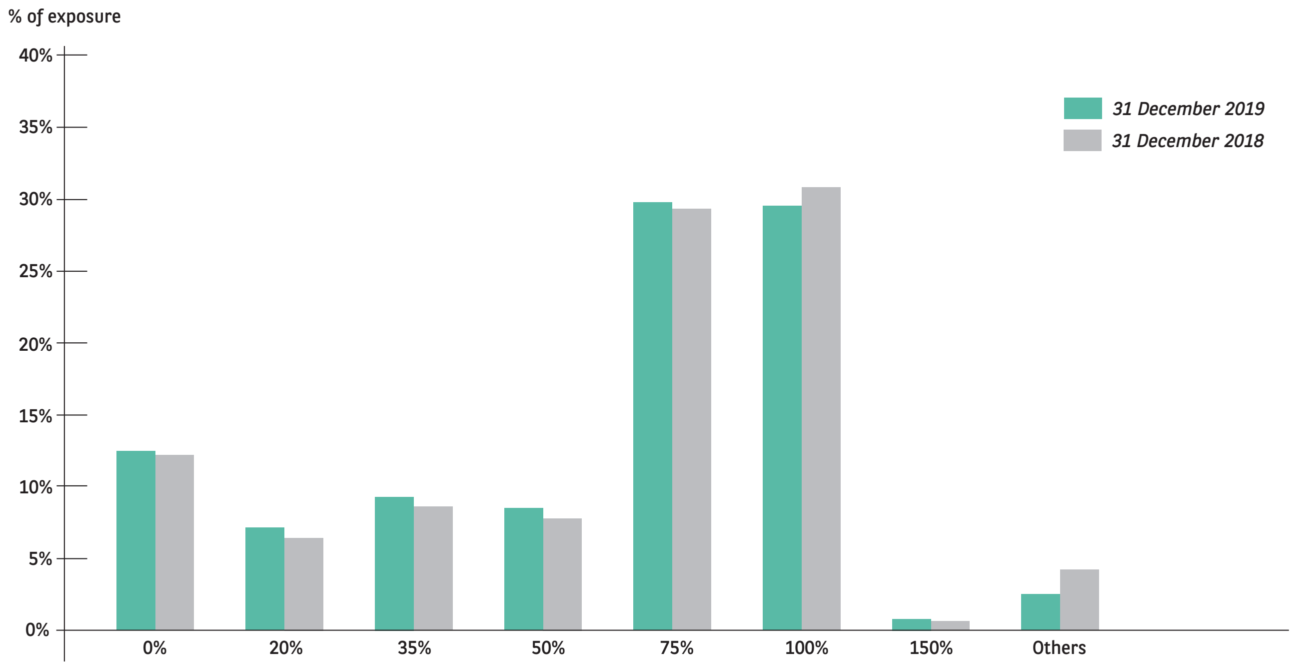
(*) Exposures to counterparties without a credit rating from external rating agencies.
(**) Immovable property financing exposures whose risk profile may be affected by market conditions.

Risk weight *In millions of euros*	0%	20%	35%	50%	75%	100%	150%	Other	Total	of which unrated(*)
	31 December 2018									
	EAD									
Central governments or central banks	27,167	1,455	-	1,012	-	5,326	-	-	**34,960**	17,237
Regional governments or local authorities	1,466	3,125	-	-	-	156	-	-	**4,747**	1,306
Public sector entities	8,336	3,067	-	76	-	1,761	-	-	**13,241**	7,711
Multilateral development banks	120	-	-	-	-	-	-	-	**120**	-
International organisations	-	-	-	-	-	-	-	-	**-**	-
Institutions	804	7,645	-	1,239	-	2,371	7	-	**12,066**	1,153
Corporates	1,330	7,206	-	6,217	-	78,378	891	-	**94,021**	66,297
Retail	-	-	-	-	96,919	-	-	-	**96,919**	96,919
Exposures secured by mortgages on immovable property	-	-	30,249	18,768	6,108	2,804	27	-	**57,956**	57,034
Exposures in default	-	-	-	-	-	3,887	1,355	-	**5,242**	5,198
Exposures in the form of units or shares in collective investment undertakings	68	54	-	-	-	66	-	-	**188**	188
Equity	-	-	-	-	-	213	-	-	**213**	213
Other items	3,622	113	-	90	-	13,343	-	14,845	**32,013**	30,192
TOTAL	**42,912**	**22,665**	**30,249**	**27,403**	**103,027**	**108,305**	**2,281**	**14,845**	**351,686**	**283,447**

(*) *Exposures to counterparties without a credit rating from external rating agencies.*

The following chart shows a breakdown by risk weight of EAD outstandings relating to credit risk for all the Group's business lines, measured using the standardised approach:

➤ FIGURE 9: STANDARDISED EXPOSURE AT DEFAULT BY RISK WEIGHT



CREDIT RISK: EQUITIES UNDER THE SIMPLE WEIGHTING METHOD

EXPOSURE

Exposures under the simple weighting method at 31 December 2019 amounted to EUR 16.9 billion, versus EUR 13.0 billion at 31 December 2018.

Scope

The shares held by the Group outside trading portfolios are securities "conferring residual and subordinated rights on issuer's assets or income, or securities representing a similar economic nature". They encompass:

- listed and unlisted shares, including shares in investment funds;
- embedded options of convertible bonds, redeemable or exchangeable for shares;
- equity options;
- Super Subordinated Securities;
- private funds commitments;
- equity holdings hedge;
- shares of consolidated entities using the equity method.

The scope of exposures benefiting from the simple weighting method does not include the following items:

- stakes higher than 10% in credit or financial institutions, mainly consolidated by the equity method or held as financial assets at fair value through equity, are exempt from the equity deduction, being weighted at a flat rate of 250% (exposure of EUR 3.1 billion at 31 December 2019 compared with EUR 3.3 billion at 31 December 2018);
- asset value guarantees given to UCITS unit holders are weighted using the standardised approach (exposure of EUR 1.0 billion at 31 December 2019 compared with EUR 1.3 billion at 31 December 2018).

Accounting principles and valuation methods

Accounting principles and valuation methods are set out in note 1.e to the consolidated financial statements – *Financial assets and liabilities*.

Total gains and losses

Total unrealised gains and losses recorded in shareholders' equity are set out in note 5.c. to the consolidated financial statements – *Financial assets at fair value through equity*.

RISK-WEIGHTED ASSETS

The simple weighting method gives the following risk weights for the calculation of risk-weighted assets:

- 190% for investments held for medium/long-term valuation purposes within the activity of the Principal Investments business, as well as private equity exposures in diversified portfolios in line with the Bank's business line activities;
- 290% for exposures in the form of listed securities, including primarily investments related to the Bank's business line activities. In addition, some exposures relating to Principal Investments are also included in this category;
- 370% for all other exposures in the form of equities, primarily including entities consolidated using the equity method (including the Group's insurance entities in the prudential scope that are included in the Table 41: *Insurance undertakings (EU INS1)*). Furthermore, this risk weight is also applied to unlisted investments in non-diversified portfolios.

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➤ TABLE 40: EQUITY POSITIONS UNDER THE SIMPLE WEIGHTING METHOD (EU CR10)

	31 December 2019						
In millions of euros	On-balance-sheet gross exposure	Off-balance-sheet gross exposure	Total gross exposure	EAD	Risk weight	RWAs	Capital requirement
Private equity exposures in diversified portfolios	2,271	956	3,227	2,749	190%	5,224	418
Listed equity exposures	1,260	60	1,320	1,290	290%	3,741	299
Other equity exposures	12,106	234	12,339	12,223	370%	45,224	3,618
TOTAL	**15,637**	**1,249**	**16,887**	**16,262**		**54,189**	**4,335**

	31 December 2018						
In millions of euros	On-balance-sheet gross exposure	Off-balance-sheet gross exposure	Total gross exposure	EAD	Risk weight	RWAs	Capital requirement
Private equity exposures in diversified portfolios	1,983	648	2,630	2,306	190%	4,382	351
Listed equity exposures	1,193	213	1,405	1,349	290%	3,912	313
Other equity exposures	8,834	89	8,923	8,879	370%	32,851	2,628
TOTAL	**12,010**	**949**	**12,959**	**12,534**		**41,146**	**3,292**

As at 31 December 2019, the Group did not use simple risk weights for specialised lending exposures.

➤ TABLE 41: INSURANCE UNDERTAKINGS (EU INS1)

In millions of euros	31 December 2019	31 December 2018
Holdings in insurance companies(*) (before 370% risk weight)	8,041	6,648
TOTAL RISK-WEIGHTED ASSETS	**29,753**	**24,599**

(*) *Significant financial holdings in insurance companies consolidated by the equity method within the prudential scope, benefiting from the provisions of article 49 of Regulation (EU) No. 575/2013 on exemptions from deduction from regulatory capital of holdings in an insurance company. Under the provisions of article 48 of Regulation (EU) No. 575/2013, a potential deduction from regulatory capital would have a limited impact with a decrease of around 10 basis points in the CET1 ratio.*

➤ TABLE 42: EQUITY UNDER THE SIMPLE WEIGHTING METHOD RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER

		Key driver								
In millions of euros	31 December 2018	Asset size	Asset quality	Model updates	Methodology and policy	Acquisitions and disposals	Currency	Other	Total variation	31 December 2019
RWAs	41,146	6,825	18	-	-	6,129	-	71	13,043	54,189

The change in risk-weighted assets in 2019 is attributed mainly to the increase in the carrying amount of the insurance entities and the change in the consolidation method of some of the Group's unregulated entities.

EXPOSURES, PROVISIONS AND COST OF RISK [Audited]

Impaired exposures (stage 3) related to assets at amortised cost and financing and guarantee commitments given, as well as the guarantees received as collateral are presented in note 5.f to the financial statements.

The following table shows the carrying amount of performing and non-performing[1] financial assets included in the prudential consolidation scope in accordance with the EBA's "Guidelines on disclosure of non-performing and forborne exposures" published on 17 December 2018.

An exposure is deemed to be non-performing when it falls into one of the following categories:

- exposures in default;
- ninety days past-due exposures which are not in default;
- restructured loans (see the *Restructured loans* section) during the one-year minimal period required before returning to performing status.

In accordance with these guidelines, the classifications used for exposures shown are taken from financial reports intended for the supervisory authority[2] and so differ from the exposure classes usually used within the context of Pillar 3. The classification includes:

- the central banks;
- the public administrations including mainly central governments, regional or local authorities and international organisations;
- the credit institutions including credit institutions and multilateral development banks;
- the other financial corporations including institutions (notably supervised investment companies and clearing houses) and corporations (mainly investment funds, pension funds and insurance companies);
- the non-financial corporations including mainly corporations and small and medium enterprises (SME);
- the households: mainly non-SME retail portfolio.

(1) As at 31 December 2019, the Group's non-performing loans ratio was 3.2%, compared with 3.8% at 31 December 2018. This ratio is used by the European Banking Authority to monitor non-performing outstandings in Europe. It is calculated on the basis of gross outstanding of loans, receivables and deposits with central banks, not netted of guarantees received.

(2) Appendix III and Appendix V of Implementing Regulation (EU) No. 680/2014 on supervisory reporting.

➤ TABLE 43: PERFORMING AND NON PERFORMING EXPOSURES AND RELATED PROVISIONS (EU NPL4) [Audited]

In millions of euros	31 December 2019											
	Gross carrying amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					
	Performing exposures			Non-performing exposures			Performing exposures			Non-performing exposures		
		of which stage 1	of which stage 2		of which stage 1 and stage 2	of which stage 3		of which stage 1	of which stage 2		of which stage 1 and stage 2	of which stage 3
Loans and advances	**992,643**	**916,056**	**76,587**	**33,314**	**3,050**	**30,264**	**(4,310)**	**(1,620)**	**(2,690)**	**(17,051)**	**(489)**	**(16,562)**
Central banks	154,017	153,586	431	-	-	-	-	-	-	-	-	-
General governments	34,855	33,014	1,841	266	135	131	(26)	(7)	(19)	(34)	(8)	(26)
Credit institutions	18,961	18,565	396	96	3	93	(8)	(6)	(2)	(80)	-	(80)
Other financial corporations	72,619	69,567	3,052	1,354	6	1,348	(143)	(61)	(82)	(884)	-	(884)
Non-financial corporations	386,707	345,889	40,818	16,477	610	15,867	(1,597)	(638)	(959)	(8,420)	(11)	(8,409)
of which SMEs	*113,081*	*96,420*	*16,661*	*7,021*	*145*	*6,876*	*(762)*	*(279)*	*(483)*	*(3,289)*	*(4)*	*(3,285)*
Households	325,484	295,435	30,049	15,121	2,296	12,825	(2,536)	(908)	(1,628)	(7,633)	(470)	(7,163)
Debt securities	**165,449**	**164,434**	**1,015**	**483**	**-**	**483**	**(74)**	**(35)**	**(39)**	**(282)**	**-**	**(282)**
Central banks	3,368	3,324	44	1	-	1	(2)	(1)	(1)	(2)	-	(2)
General governments	127,683	127,548	135	-	-	-	(28)	(22)	(6)	-	-	-
Credit institutions	11,809	11,758	51	117	-	117	-	-	-	(112)	-	(112)
Other financial corporations	18,138	17,415	723	93	-	93	(35)	(10)	(25)	(45)	-	(45)
Non-financial corporations	4,451	4,389	62	272	-	272	(9)	(2)	(7)	(123)	-	(123)
Off-balance sheet exposures	**480,031**	**463,578**	**16,453**	**2,527**	**1**	**2,526**	**(484)**	**(259)**	**(225)**	**(334)**	**(1)**	**(333)**
Central banks	16,851	16,771	80	-	-	-	-	-	-	-	-	-
General governments	24,963	24,156	807	28	-	28	(4)	(1)	(3)	(12)	-	(12)
Credit institutions	20,436	19,855	581	19	-	19	(19)	(5)	(14)	-	-	-
Other financial corporations	68,687	67,827	860	85	-	85	(22)	(16)	(6)	(19)	-	(19)
Non-financial corporations	288,416	276,543	11,873	2,260	-	2,260	(322)	(175)	(147)	(299)	-	(299)
Households	60,678	58,426	2,252	135	1	134	(117)	(62)	(55)	(4)	(1)	(3)
TOTAL	**1,638,123**	**1,544,068**	**94,055**	**36,324**	**3,051**	**33,273**	**(4,868)**	**(1,914)**	**(2,954)**	**(17,667)**	**(490)**	**(17,177)**

	31 December 2018											
	Gross carrying amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					
	Performing exposures			Non-performing exposures			Performing exposures			Non-performing exposures		
In millions of euros		of which stage 1	of which stage 2		of which stage 1 and stage 2	of which stage 3		of which stage 1	of which stage 2		of which stage 1 and stage 2	of which stage 3
Loans and advances	**964,969**	**878,033**	**86,936**	**37,854**	**3,166**	**34,688**	**(4,480)**	**(1,536)**	**(2,944)**	**(19,975)**	**(409)**	**(19,566)**
Central banks	184,962	184,774	188	-	-	-	-	-	-	-	-	-
General governments	35,909	33,279	2,630	877	651	226	(27)	(6)	(21)	(33)	(8)	(25)
Credit institutions	16,745	16,333	412	154	-	154	(42)	(7)	(35)	(92)	-	(92)
Other financial corporations	66,404	62,962	3,442	1,285	26	1,259	(119)	(46)	(73)	(942)	(1)	(941)
Non-financial corporations	349,798	302,396	47,402	19,417	431	18,986	(1,542)	(581)	(961)	(10,603)	(6)	(10,597)
of which SMEs	*104,362*	*89,037*	*15,325*	*9,996*	*143*	*9,853*	*(746)*	*(257)*	*(489)*	*(5,319)*	*(4)*	*(5,315)*
Households	311,151	278,289	32,862	16,121	2,058	14,063	(2,750)	(896)	(1,854)	(8,305)	(394)	(7,911)
Debt securities	**135,568**	**134,306**	**1,262**	**494**	**-**	**494**	**(80)**	**(28)**	**(52)**	**(276)**	**-**	**(276)**
Central banks	4,758	4,758	-	-	-	-	(1)	(1)	-	-	-	-
General governments	102,157	102,006	151	-	-	-	(22)	(15)	(7)	-	-	-
Credit institutions	9,644	9,565	79	126	-	126	(7)	(3)	(4)	(113)	-	(113)
Other financial corporations	15,541	14,613	928	129	-	129	(39)	(8)	(31)	(57)	-	(57)
Non-financial corporations	3,468	3,364	104	239	-	239	(11)	(1)	(10)	(106)	-	(106)
Off-balance sheet exposures	**448,844**	**431,629**	**17,215**	**1,939**	**11**	**1,928**	**(457)**	**(237)**	**(220)**	**(319)**	**(1)**	**(318)**
Central banks	21,442	21,440	2	-	-	-	-	-	-	-	-	-
General governments	29,329	28,159	1,170	43	-	43	(4)	(1)	(3)	(12)	-	(12)
Credit institutions	15,223	14,439	784	6	-	6	(21)	(4)	(17)	(1)	-	(1)
Other financial corporations	54,443	52,790	1,653	50	-	50	(20)	(13)	(7)	(17)	-	(17)
Non-financial corporations	271,360	259,745	11,615	1,727	10	1,717	(295)	(157)	(138)	(282)	(1)	(281)
Households	57,047	55,056	1,991	113	1	112	(117)	(62)	(55)	(7)	-	(7)
TOTAL	**1,549,381**	**1,443,968**	**105,413**	**40,287**	**3,177**	**37,110**	**(5,017)**	**(1,801)**	**(3,216)**	**(20,570)**	**(410)**	**(20,160)**

➤ TABLE 44: PERFORMING AND NON PERFORMING EXPOSURES BY PAST DUE DAYS (EU NPL3) [Audited]

	31 December 2019									
	Performing exposures			Non-performing exposures						
In millions of euros		Not past due or ≤ 30 days	> 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year ≤ 5 years	> 5 years	of which defaulted
Loans and advances	**992,643**	**989,120**	**3,523**	**33,314**	**7,239**	**1,925**	**2,087**	**11,237**	**10,826**	**30,264**
Central banks	154,017	154,017	-	-	-	-	-	-	-	-
General governments	34,855	34,722	133	266	30	12	33	121	70	131
Credit institutions	18,961	18,956	5	96	18	3	1	60	14	93
Other financial corporations	72,619	72,554	65	1,354	514	8	37	187	608	1,348
Non-financial corporations	386,707	384,869	1,838	16,477	4,029	791	1,044	4,129	6,484	15,867
of which SMEs	*113,081*	*112,378*	*703*	*7,021*	*949*	*394*	*431*	*2,243*	*3,004*	*6,876*
Households	325,484	324,002	1,482	15,121	2,648	1,111	972	6,740	3,650	12,825
Debt securities	**165,449**	**165,449**	**-**	**483**	**324**	**-**	**-**	**103**	**56**	**483**
Central banks	3,368	3,368	-	1	1	-	-	-	-	1
General governments	127,683	127,683	-	-	-	-	-	-	-	-
Credit institutions	11,809	11,809	-	117	5	-	-	99	13	117
Other financial corporations	18,138	18,138	-	93	67	-	-	4	22	93
Non-financial corporations	4,451	4,451	-	272	251	-	-	-	21	272
Off-balance sheet exposures	**480,031**			**2,527**						**2,526**
Central banks	16,851			-						-
General governments	24,963			28						28
Credit institutions	20,436			19						19
Other financial corporations	68,687			85						85
Non-financial corporations	288,416			2,260						2,260
Households	60,678			135						134
TOTAL	**1,638,123**	**1,154,569**	**3,523**	**36,324**	**7,563**	**1,925**	**2,087**	**11,340**	**10,882**	**33,273**

										31 December 2018
		Performing exposures								Non-performing exposures
In millions of euros		Not past due or ≤ 30 days	> 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year ≤ 2 years	> 5 years	of which defaulted
Loans and advances	**964,969**	**960,032**	**4,937**	**37,854**	**7,343**	**2,007**	**1,961**	**13,572**	**12,971**	**34,688**
Central banks	184,962	184,962	-	-	-	-	-	-	-	-
General governments	35,909	35,871	38	877	50	57	106	590	74	226
Credit institutions	16,745	16,744	1	154	37	1	-	73	43	154
Other financial corporations	66,404	66,395	9	1,285	470	28	34	182	571	1,259
Non-financial corporations	349,798	346,366	3,432	19,417	4,208	770	808	5,076	8,555	18,986
of which SMEs	*104,362*	*103,198*	*1,164*	*9,996*	*996*	*294*	*319*	*2,932*	*5,455*	*9,853*
Households	311,151	309,694	1,457	16,121	2,578	1,151	1,013	7,651	3,728	14,063
Debt securities	**135,568**	**135,568**	**-**	**494**	**322**	**-**	**-**	**103**	**69**	**494**
Central banks	4,758	4,758	-	-	-	-	-	-	-	-
General governments	102,157	102,157	-	-	-	-	-	-	-	-
Credit institutions	9,644	9,644	-	126	15	-	-	99	12	126
Other financial corporations	15,541	15,541	-	129	73	-	-	4	52	129
Non-financial corporations	3,468	3,468	-	239	234	-	-	-	5	239
Off-balance sheet exposures	**448,844**			**1,939**						**1,928**
Central banks	21,442			-						-
General governments	29,329			43						43
Credit institutions	15,223			6						6
Other financial corporations	54,443			50						50
Non-financial corporations	271,360			1,727						1,717
Households	57,047			113						112
TOTAL	**1,549,381**	**1,095,600**	**4,937**	**40,287**	**7,665**	**2,007**	**1,961**	**13,675**	**13,040**	**37,110**

The following table shows the carrying amounts of the financial assets subject to impairment provisions for credit risk broken down by stage of impairment and by BNP Paribas internal rating in the prudential scope. Financial assets subject to impairment are recognised in the following accounting categories:

- amounts due from central banks (excluding cash);
- debt securities at fair value through equity or at amortised cost;
- loans and advances at amortised cost;
- financing and guarantee commitments given (off-balance sheet).

TABLE 45: BREAKDOWN OF FINANCIAL ASSETS SUBJECT TO IMPAIRMENT BY STAGE AND INTERNAL RATING [Audited]

	31 December 2019							
	Gross carrying value							
	BNP Paribas rating or equivalent							
In millions of euros	1 to 3	4 to 5	6 to 8	9 to 10	Defaulted	TOTAL	Impairments	Net carrying value
Central Banks	**147,801**	**1,452**	**1,985**	**321**	**-**	**151,559**	**(16)**	**151,543**
Stage 1	147,801	1,441	1,911	-	-	151,154	(16)	151,137
Stage 2	-	11	74	321	-	406	-	406
Stage 3	-	-	-	-	-	-	-	-
Debt securities at fair value through equity	**49,123**	**2,833**	**1,793**	**9**	**117**	**53,875**	**(140)**	**53,735**
Stage 1	49,123	2,702	1,672	-	-	53,497	(5)	53,492
Stage 2	-	131	121	9	-	261	(22)	239
Stage 3	-	-	-	-	117	117	(113)	4
Loans and advances at amortised cost	**183,774**	**259,584**	**388,154**	**11,451**	**30,233**	**873,196**	**(21,374)**	**851,822**
Stage 1	183,774	247,877	332,798	-	-	764,449	(1,632)	762,817
Stage 2	-	11,707	55,356	11,451	-	78,514	(3,176)	75,338
Stage 3	-	-	-	-	30,233	30,233	(16,566)	13,667
Debt securities at amortised cost	**96,670**	**9,576**	**3,057**	**98**	**204**	**109,605**	**(134)**	**109,472**
Stage 1	96,670	9,077	2,900	-	-	108,647	(30)	108,617
Stage 2	-	499	157	98	-	754	(17)	737
Stage 3	-	-	-	-	204	204	(87)	117
Financing and guarantee commitments	**220,902**	**138,880**	**117,624**	**2,627**	**2,526**	**482,559**	**(818)**	**481,741**
Stage 1	220,902	135,934	106,742	-	-	463,578	(259)	463,319
Stage 2	-	2,946	10,882	2,627	-	16,455	(225)	16,230
Stage 3	-	-	-	-	2,526	2,526	(334)	2,192
TOTAL	**698,270**	**412,325**	**512,613**	**14,505**	**33,080**	**1,670,794**	**(22,482)**	**1,648,312**

In millions of euros	31 December 2018							
	Gross carrying value						Impairments	Net carrying value
	BNP Paribas rating or equivalent					TOTAL		
	1 to 3	4 to 5	6 to 8	9 to 10	Defaulted			
Central Banks	**177,283**	**1,381**	**2,897**	**183**	**-**	**181,744**	**(15)**	**181,729**
Stage 1	177,283	1,381	2,897	-	-	181,561	(14)	181,547
Stage 2	-	-	-	183	-	183	(1)	182
Stage 3	-	-	-	-	-	-	-	-
Debt securities at fair value through equity	**52,878**	**1,690**	**2,443**	**261**	**114**	**57,386**	**(140)**	**57,246**
Stage 1	52,878	1,680	2,221	-	-	56,779	(7)	56,772
Stage 2	-	10	222	261	-	493	(21)	472
Stage 3	-	-	-	-	114	114	(112)	2
Loans and advances at amortised cost	**181,102**	**238,038**	**349,087**	**16,971**	**34,662**	**819,860**	**(24,473)**	**795,387**
Stage 1	181,102	221,165	294,071	-	-	696,338	(1,544)	694,794
Stage 2	-	16,873	55,016	16,971	-	88,860	(3,356)	85,504
Stage 3	-	-	-	-	34,662	34,662	(19,573)	15,089
Debt securities at amortised cost	**68,488**	**5,661**	**1,884**	**70**	**194**	**76,297**	**(130)**	**76,167**
Stage 1	68,488	5,218	1,628	-	-	75,334	(21)	75,313
Stage 2	-	443	256	70	-	769	(31)	738
Stage 3	-	-	-	-	194	194	(78)	116
Financing and guarantee commitments	**214,378**	**121,557**	**109,592**	**3,322**	**1,929**	**450,778**	**(775)**	**450,003**
Stage 1	214,378	117,554	99,693	-	-	431,625	(237)	431,388
Stage 2	-	4,003	9,899	3,322	-	17,224	(220)	17,004
Stage 3	-	-	-	-	1,929	1,929	(318)	1,611
TOTAL	**694,129**	**368,327**	**465,903**	**20,807**	**36,899**	**1,586,065**	**(25,533)**	**1,560,532**

The following tables show the breakdown by regulatory asset class, geographic area, and economic sector of doubtful assets and impairments limited to the scope of exposures subject to credit risk (see Table 11: *Prudential balance sheet by risk type (EU LI1-B)*). The exposure amounts are gross of impairments and before accounting for credit risk mitigation techniques (funded or unfunded credit protection).

TABLE 46: EXPOSURES AND PROVISIONS BY ASSET CLASS (EU CR1-A)

	31 December 2019				
	Gross exposure				
In millions of euros	Defaulted exposures	Non-defaulted exposures	Total	Stage 3 provisions	Stage 1 and stage 2 provisions
Central governments or central banks	59	270,296	**270,355**	(9)	(18)
Institutions	406	57,731	**58,137**	(320)	(39)
Corporates	11,749	541,523	**553,272**	(5,804)	(985)
Retail	9,589	263,904	**273,493**	(4,877)	(1,318)
Secured by real estate property	*3,608*	*174,149*	**177,757**	*(1,075)*	*(203)*
of which SME	*570*	*11,214*	**11,784**	*(183)*	*(50)*
of which non-SME	*3,039*	*162,935*	**165,974**	*(892)*	*(154)*
Qualifying revolving	*1,059*	*16,780*	**17,839**	*(762)*	*(267)*
Other retail	*4,921*	*72,976*	**77,897**	*(3,041)*	*407*
of which SME	*2,300*	*25,985*	**28,285**	*(1,247)*	*(220)*
of which non-SME	*2,621*	*46,991*	**49,612**	*(1,794)*	*(628)*
Other items	-	459	**459**	-	-
TOTAL IRB APPROACH	**21,803**	**1,133,913**	**1,155,716**	**(11,010)**	**(2,360)**
Central governments or central banks	2	29,518	**29,520**	(2)	(36)
Regional governments or local authorities	34	5,916	**5,950**	(7)	(5)
Public sector entities	7	18,176	**18,183**	(2)	(5)
Multilateral development banks	-	192	**192**	-	-
International organisations	-	9	**9**	-	-
Institutions	13	10,813	**10,826**	(5)	(21)
Corporates	2,432	118,520	**120,952**	(1,362)	(491)
of which SME	*999*	*26,482*	**27,481**	*(544)*	*(188)*
Retail	5,577	130,019	**135,596**	(3,552)	(1,644)
of which SME	*1,741*	*31,750*	**33,492**	*(982)*	*(306)*
Exposures secured by mortgages on immovable property	2,696	70,732	**73,429**	(1,105)	(689)
of which SME	*923*	*20,636*	**21,559**	*(405)*	*(194)*
Exposures in default					
Items associated with particular high risk(*)	63	1,187	**1,250**	(37)	(7)
Exposures in the form of units or shares in collective investment undertakings	-	533	**533**	-	-
Equity	-	782	**782**	-	-
Other items	-	28,314	**28,314**	-	-
TOTAL STANDARDISED APPROACH	**10,826**	**414,710**	**425,536**	**(6,072)**	**(2,897)**
TOTAL	**32,629**	**1,548,623**	**1,581,252**	**(17,082)**	**(5,257)**

(*) *Immovable property financing exposures whose risk profile may be affected by market conditions.*

In millions of euros	31 December 2018				
	Gross exposure			Stage 3 provisions	Stage 1 and stage 2 provisions
	Defaulted exposures	Non-defaulted exposures	Total		
Central governments or central banks	103	284,708	**284,811**	(9)	
Institutions	315	46,544	**46,859**	(206)	
Corporates	13,028	491,378	**504,405**	(7,049)	
Retail	10,574	252,988	**263,561**	(5,716)	
Secured by real estate property	*3,969*	*163,938*	**167,907**	*(1,305)*	
of which SME	*687*	*11,055*	**11,742**	*(216)*	
of which non-SME	*3,282*	*152,882*	**156,164**	*(1,089)*	
Qualifying revolving	*1,150*	*16,881*	**18,031**	*(869)*	
Other retail	*5,454*	*72,169*	**77,624**	*(3,542)*	
of which SME	*2,478*	*25,552*	**28,030**	*(1,462)*	
of which non-SME	*2,976*	*46,618*	**49,593**	*(2,080)*	
Other items	-	833	**833**	-	
TOTAL IRB APPROACH	**24,019**	**1,076,450**	**1,100,469**	**(12,979)**	**(2,365)**
Central governments or central banks	2	30,673	**30,675**	(2)	
Regional governments or local authorities	42	6,892	**6,934**	(9)	
Public sector entities	8	14,219	**14,228**	(4)	
Multilateral development banks	-	120	**120**	-	
International organisations	-	-	**-**	-	
Institutions	35	11,915	**11,950**	(15)	
Corporates	3,287	120,970	**124,257**	(1,859)	
of which SME	*875*	*21,389*	**22,264**	*(487)*	
Retail	5,827	129,143	**134,970**	(3,654)	
of which SME	*1,684*	*29,650*	**31,334**	*(968)*	
Exposures secured by mortgages on immovable property	3,430	69,850	**73,280**	(1,531)	
of which SME	*1,068*	*17,447*	**18,515**	*(548)*	
Exposures in default					
Exposures in the form of units or shares in collective investment undertakings	-	603	**603**	-	
Equity	-	1,063	**1,063**	-	
Other items	-	32,013	**32,013**	-	
TOTAL STANDARDISED APPROACH	**12,632**	**417,462**	**430,094**	**(7,073)**	**(3,075)**
TOTAL	**36,651**	**1,493,912**	**1,530,563**	**(20,052)**	**(5,440)**

TABLE 47: EXPOSURES AND PROVISIONS BY GEOGRAPHIC BREAKDOWN (EU CR1-C) [Audited]

In millions of euros		31 December 2019				
		Gross exposure				
		Defaulted exposures	Non-defaulted exposures	Total	Stage 3 provisions	Stage 1 and stage 2 provisions
Europe[(*)]		26,604	1,144,755	1,171,359	(13,692)	(4,065)
	France	8,026	466,426	474,451	(4,646)	(1,744)
	Belgium	2,660	168,495	171,155	(964)	(247)
	Luxembourg	258	40,853	41,111	(88)	(21)
	Italy	10,085	147,876	157,961	(5,367)	(923)
	United Kingdom	1,339	77,900	79,239	(747)	(162)
	Germany	925	64,399	65,324	(491)	(238)
	Netherlands	214	29,810	30,024	(93)	(26)
	Other European countries	3,096	148,998	152,094	(1,296)	(704)
North America		1,406	218,161	219,566	(503)	(436)
Asia Pacific		300	95,756	96,056	(162)	(65)
	Japan	0	19,497	19,497	(0)	(3)
	North Asia	11	34,514	34,525	(8)	(34)
	South-East Asia (ASEAN)	139	21,372	21,511	(93)	(16)
	Indian peninsula & Pacific	149	20,374	20,523	(61)	(12)
Rest of the World		4,320	89,951	94,270	(2,725)	(691)
	Turkey	796	22,723	23,520	(446)	(217)
	Mediterranean	935	11,410	12,345	(609)	(168)
	Gulf States & Africa	1,553	20,123	21,676	(864)	(137)
	Latin America	325	18,749	19,074	(243)	(103)
	Other countries	711	16,945	17,656	(563)	(66)
TOTAL		**32,629**	**1,548,623**	**1,581,252**	**(17,082)**	**(5,257)**

(*) Within the European Union and the European Free Trade Association (EFTA).

In millions of euros		31 December 2018				
		Gross exposure				
		Defaulted exposures	Non-defaulted exposures	Total	Stage 3 provisions	Stage 1 and stage 2 provisions
Europe(*)		**31,064**	**1,115,396**	**1,146,459**	**(16,828)**	
	France	8,357	483,981	**492,339**	(4,856)	
	Belgium	2,720	167,312	**170,032**	(980)	
	Luxembourg	301	38,323	**38,624**	(143)	
	Italy	14,039	142,260	**156,299**	(8,187)	
	United Kingdom	1,393	70,909	**72,302**	(796)	
	Germany	692	51,785	**52,478**	(371)	
	Netherlands	95	29,072	**29,166**	(46)	
	Other European countries	3,467	131,753	**135,219**	(1,448)	
North America		**1,075**	**206,731**	**207,807**	**(581)**	
Asia Pacific		**353**	**85,705**	**86,057**	**(102)**	
	Japan	-	19,394	**19,395**	-	
	North Asia	8	28,095	**28,103**	(7)	
	South-East Asia (ASEAN)	178	18,753	**18,931**	(23)	
	Indian peninsula & Pacific	167	19,462	**19,628**	(72)	
Rest of the World		**4,159**	**86,081**	**90,240**	**(2,541)**	
	Turkey	608	23,953	**24,561**	(332)	
	Mediterranean	853	11,522	**12,375**	(540)	
	Gulf States & Africa	1,586	17,563	**19,150**	(870)	
	Latin America	320	17,340	**17,660**	(278)	
	Other countries	791	15,702	**16,493**	(521)	
TOTAL		**36,651**	**1,493,912**	**1,530,563**	**(20,052)**	**(5,440)**

(*) Within the European Union and the European Free Trade Association (EFTA).

TABLE 48: EXPOSURES AND STAGE 3 PROVISIONS BY INDUSTRY (EU CR1-B) [Audited]

In millions of euros	31 December 2019			
	Gross exposure			
	Defaulted exposures	Non-defaulted exposures	Total	Stage 3 provisions
Agriculture, Food, Tobacco	1,248	38,341	**39,589**	(557)
Insurance	19	15,383	**15,403**	(7)
Chemicals excluding Pharmaceuticals	67	14,402	**14,469**	(53)
Building & Public works	3,493	30,938	**34,431**	(1,644)
Retail trade	1,294	42,864	**44,158**	(689)
Energy excluding Electricity	787	24,395	**25,182**	(527)
Equipment excluding IT Electronic	791	43,560	**44,351**	(436)
Finance	955	298,999	**299,954**	(805)
Real estate	3,158	93,749	**96,907**	(1,416)
Information technologies	203	23,546	**23,750**	(94)
Minerals, metals & materials (including cement, packaging, etc.)	857	30,047	**30,905**	(452)
Wholesale trade	1,961	59,930	**61,891**	(1,281)
Private individual	12,398	399,769	**412,167**	(6,639)
Healthcare & Pharmaceuticals	150	23,297	**23,447**	(58)
Services to public authorities (electricity, gas, water, etc.)	742	39,789	**40,532**	(177)
Business services	1,137	80,872	**82,009**	(730)
Communication services	140	19,067	**19,207**	(51)
Sovereign	126	141,583	**141,708**	(33)
Transportation & Storage	1,350	66,743	**68,093**	(489)
Other	1,751	61,348	**63,099**	(945)
TOTAL	**32,629**	**1,548,623**	**1,581,252**	**(17,082)**

In millions of euros	31 December 2018			
	Gross exposure			Stage 3 provisions
	Defaulted exposures	Non-defaulted exposures	Total	
Agriculture, Food, Tobacco	1,476	42,888	**44,364**	(818)
Insurance	17	15,971	**15,988**	(5)
Chemicals excluding Pharmaceuticals	75	15,715	**15,789**	(53)
Building & Public works	4,126	30,385	**34,511**	(2,147)
Retail trade	1,147	39,223	**40,369**	(762)
Energy excluding Electricity	907	21,477	**22,384**	(535)
Equipment excluding IT Electronic	968	41,927	**42,895**	(566)
Finance	813	325,018	**325,831**	(613)
Real estate	3,916	88,567	**92,484**	(1,873)
Information technologies	227	21,966	**22,193**	(117)
Minerals, metals & materials (including cement, packaging, etc.)	1,038	29,081	**30,118**	(621)
Wholesale trade	2,269	60,576	**62,845**	(1,470)
Private individual	13,610	388,974	**402,584**	(7,491)
Healthcare & Pharmaceuticals	146	20,530	**20,676**	(78)
Services to public authorities (electricity, gas, water, etc.)	366	35,990	**36,356**	(187)
Business services	1,691	76,772	**78,463**	(807)
Communication services	320	18,765	**19,085**	(113)
Sovereign	187	115,772	**115,960**	(33)
Transportation & Storage	1,415	45,100	**46,515**	(607)
Other	1,937	59,215	**61,151**	(1,158)
TOTAL	**36,651**	**1,493,912**	**1,530,563**	**(20,052)**

Doubtful loans fell by EUR 4 billion in 2019, especially in Italy in connection with the disposal of portfolios of defaulted exposures and the implementation of a securitisation programme.

The main effects which explain changes in the amount of doubtful loans in 2019 (EU CR2-B) are shown in note 5.f to the consolidated financial statements.

The cost of risk and the changes in impairments related to credit risk are presented in the consolidated financial statements – note 3.h – *Cost of risk*.

RESTRUCTURED LOANS [Audited]

When a borrower is bordering on or in financial difficulties, he may receive a concession from the bank that would otherwise not have been granted had the borrower not met with financial difficulty. The concession may be:

- a change to the contract terms and conditions;
- partial or total refinancing of the debt.

The loan is then said to be "restructured". It must retain the status of "restructured" during a period of observation, known as a probation period, for at least two years. The concept of restructuring is described in the accounting principles (note 1.e.5 to the consolidated financial statements).

According to the principles for identifying the restructured exposure amounts for the Group as a whole, for the non-retail business, exposures are identified individually during the loan process, notably during Committees. As for restructured exposures for retail customers, they are usually identified via a systematic process requiring the use of algorithms whose parameters are validated by the RISK and Finance Functions.

Information on restructured loans is reported to the supervisory authority on a quarterly basis.

The following table shows the gross value and impairment amounts of performing and non-performing loans that have been restructured.

➤ TABLE 49: CREDIT QUALITY OF RESTRUCTURED LOANS (EU NPL1) [Audited]

	31 December 2019				
	Gross carrying value			Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions	
		Non-performing exposures			
In millions of euros	Performing exposures		of which defaulted	Performing exposures	Non-performing exposures
Loans and advances	**3,408**	**8,104**	**6,141**	**(355)**	**(3,304)**
General governments	2	7	6	-	(2)
Credit institutions	-	7	7	-	(7)
Other financial corporations	76	285	285	(3)	(143)
Non-financial corporations	1,793	3,453	3,380	(122)	(1,566)
Households	1,537	4,352	2,463	(230)	(1,586)
Debt securities	**46**	**167**	**167**	**-**	**(49)**
Off-balance-sheet exposures	**447**	**133**	**132**	**(16)**	**(8)**
TOTAL	**3,901**	**8,404**	**6,440**	**(371)**	**(3,361)**

	31 December 2018				
	Gross carrying value			Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions	
		Non-performing exposures			
In millions of euros	Performing exposures		of which defaulted	Performing exposures	Non-performing exposures
Loans and advances	**2,990**	**8,312**	**6,516**	**(369)**	**(3,509)**
General governments	3	5	3	-	(2)
Credit institutions	-	9	9	-	(8)
Other financial corporations	26	331	326	(1)	(149)
Non-financial corporations	1,204	3,813	3,731	(60)	(1,737)
Households	1,757	4,154	2,447	(308)	(1,613)
Debt securities	**-**	**162**	**162**	**-**	**(47)**
Off-balance-sheet exposures	**452**	**141**	**131**	**(17)**	**(2)**
TOTAL	**3,442**	**8,615**	**6,809**	**(386)**	**(3,558)**

CREDIT RISK MITIGATION TECHNIQUES [Audited]

Credit risk mitigants (CRM) are taken into account according to the regulation. In particular, their effect is assessed under conditions characteristic of an economic downturn. The CRM fall into two main categories:

- funded credit protection (collateral) pledged to the Bank is used to secure timely performance of a borrower's financial obligations;
- unfunded credit protection (personal guarantee) is the commitment by a third party to replace the primary obligor in the event of default. By extension, credit insurance and credit derivatives (purchased protection) fall into this category.

For the scope under the IRB approach, personal guarantees and collaterals are taken into account, provided they are eligible, by decreasing the Loss Given Default (LGD) parameter corresponding to an increase in the Global Recovery Rate (GRR) that applies to the transactions of the banking book. The value taken into consideration takes account, where relevant, of currency and maturity mismatches and, for funded credit protection, of a haircut applied to the market value of the pledged asset based on a default scenario during an economic downturn. The amount of unfunded credit protection to which a haircut is applied depends on the enforceable nature of the commitment and the risk of simultaneous default by the borrower and guarantor.

For the scope under the standardised approach, unfunded credit protection is taken into account provided it is, by applying the more favourable risk weight of the guarantor to a portion of the secured exposure adjusted for currency and maturity mismatches. Funded credit protection is taken into account as a decrease in the exposure, after adjustment for any currency and maturity mismatches and a discount to take account of volatility in market value for financial security collaterals.

The assessment of credit risk mitigating effect follows a methodology that is approved for each activity and is used throughout the Group. These techniques are monitored in accordance with the monitoring and portfolio management procedures described in the *Credit risk management policy* section.

As at 31 December 2019, 70% of exposure to property loans is concentrated in the Group's two main Domestic Markets (France, Belgium). In view of the specific features of these markets (amortising long-term financing, primarily at fixed rates), the LTV (Loan-to-value) ratio is not a key monitoring indicator at Group level.

FUNDED CREDIT PROTECTION

Funded credit protection is divided into two categories:

- financial collateral:

  This consists of cash amounts (including gold), shares in collective investment funds, equities (listed or unlisted) and bonds;
- other diverse forms of collateral:

  These include real estate mortgages or ship mortgages, pledge of equipment or inventories, transfer of commercial receivables or any other rights to an asset of the counterparty.

To be eligible, funded credit protection must fulfil the following conditions:

- the value of the collateral must not be highly correlated with the risk on the obligor (in particular, shares of the obligor are not eligible);
- the pledge must be documented;
- the pledged asset must be traded on a liquid secondary market to enable rapid resale;
- the Bank must have a consistently updated value of the pledged asset;
- the Bank must have reasonable comfort in the potential appropriation and realisation of the asset concerned.

In the Retail Banking business, the presence or absence of a particular type of collateral may, depending on the coverage ratio, lead to assigning the exposure to particular LGD class on a statistical basis.

UNFUNDED CREDIT PROTECTION

Guarantors are subject to the same rigorous credit risk assessment process as primary obligors and are assigned risk parameters according to similar methods and procedures.

Guarantees are granted by the obligor's parent company or by other entities such as financial institutions. Other examples of guarantees are credit derivatives, guarantees from public insurers for export financing or private insurers.

Consideration of a guarantee consists of determining the average amount the Bank can expect to recover if the borrower defaults and the guarantee is called in. It depends on the amount of the guarantee, the risk of simultaneous default by the borrower and the guarantor (which is a function of the probability of default of the borrower, of the guarantor, and the degree of correlation between borrower and guarantor default, which is high if they belong to the same business group or the same sector and low if not) and the enforceable nature of the guarantee.

OPTIMISING CREDIT RISK MANAGEMENT THROUGH CDS (EU CR7)

As part of its role of optimising credit risk management for CIB, Portfolio Management (PM) sets up hedges using credit derivatives, and mainly credit default swaps (CDS). These CDS are used as part of an active management policy, the main aim being to hedge migration and concentration risks and manage major exposures. The underlying assets are loans made to large corporates by CIB Corporate Banking, and occasionally those made by the Retail Banking & Services activity.

Considered from a regulatory standpoint to be guarantees, CDS hedges totalled EUR 640 million at 31 December 2019, compared with EUR 444 million at 31 December 2018. These hedges are put on by CIB to hedge exposures mainly treated under the IRB approach. Provided they are eligible, they have the effect of decreasing the estimated Loss Given Default for the underlying asset, and, therefore, reducing its consumption in terms of risk-weighted assets. At 31 December 2019, the reduction in risk-weighted assets resulting from hedging operations via CDS concerns only the corporate asset class, and represents EUR 229 million (EU CR7).

The following tables give for the central governments and central banks, corporates and institutions portfolios the breakdown of the risk mitigation resulting from all the collaterals and guarantees relating to the portfolio of loans and credit commitments for all the Group's business lines.

➤ TABLE 50: IRBA – CREDIT RISK MITIGATION FOR SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS [Audited](1)

	31 December 2019				31 December 2018			
		Risk mitigation				Risk mitigation		
In millions of euros	Total exposure	Guarantees and credit derivatives	Collateral	Total guarantees and collateral	Total exposure	Guarantees and credit derivatives	Collateral	Total guarantees and collateral
Central governments and central banks	270,355	3,586	25	3,611	284,811	3,757	6	3,763
Corporates	553,272	87,503	75,629	163,132	504,405	77,229	70,144	147,373
Institutions	58,137	6,459	577	7,036	46,859	3,407	771	4,178
TOTAL	**881,764**	**97,549**	**76,230**	**173,779**	**836,075**	**84,393**	**70,921**	**155,314**

➤ TABLE 51: STANDARDISED APPROACH – CREDIT RISK MITIGATION FOR SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS [Audited](1)

	31 December 2019				31 December 2018			
		Risk mitigation				Risk mitigation		
In millions of euros	Total exposure	Guarantees and credit derivatives	Collateral	Total guarantees and collaterals	Total exposure	Guarantees and credit derivatives	Collateral	Total guarantees and collaterals
Central governments and central banks	41,454	0	700	700	40,579	1	3	4
Corporates	144,388	8,573	26,114	34,687	146,722	5,712	23,484	29,196
Institutions	23,266	258	63	321	23,490	637	24	661
TOTAL	**209,109**	**8,832**	**26,876**	**35,708**	**210,791**	**6,351**	**23,510**	**29,860**

(1) The audit does not cover the breakdown between the IRB and standardised approach.

5.5 Securitisation in the banking book

Securitisation means a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranched, having the following characteristics:

- payments made in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures;
- the subordination of tranches determines the distribution of losses during the life of the risk transfer.

Any commitment (including derivatives and liquidity lines) granted to a securitisation operation must be treated as a securitisation position. Most of these commitments are held in the prudential banking book (section 5.5). Commitments held in the trading book are set out in Market risk (section 5.7).

The securitisation transactions discussed below concerns:

- the programmes originated by the Group for its own account, securitising its credit exposures ("originator" role) which are recognised as efficient under Basel 3 regulatory framework;
- the programmes that the Group has structured on behalf of its clients ("sponsor" role where clients' assets are securitised), in which it has retained positions;
- the programmes to which the Group has subscribed without having a role in structuring the operation ("investor" role).

In section 5.5, securitisation positions deducted from own funds are not included. These positions amounted to EUR 225 million at 31 December 2019.

BNP PARIBAS SECURITISATION ACTIVITIES

The Group's activities in each of its roles as originator, sponsor and investor, are described below:

➤ TABLE 52: SECURITISED EXPOSURES AND SECURITISATION POSITIONS (HELD OR ACQUIRED) BY ROLE

In millions of euros	31 December 2019		31 December 2018	
BNP Paribas role	**Securitised exposures originated by BNP Paribas(*)**	**Securitised positions held or acquired (EAD)(**)**	**Securitised exposures originated by BNP Paribas(*)**	**Securitised positions held or acquired (EAD)(**)**
Originator(***)	39,281	30,216	21,506	18,919
Sponsor	6	22,145	18	19,222
Investor	0	8,915	0	5,467
TOTAL	**39,287**	**61,276**	**21,524**	**43,608**

(*) Securitised exposures originated by the Group correspond to the underlying exposures recognised on the Group's balance sheet and off-balance sheet which have been securitised.

(**) Securitisation positions correspond to tranches retained and off-balance sheet commitments granted by the Group in securitisation transactions originated or arranged by the Group, as well as tranches acquired by the Group in securitisation transactions arranged by other parties. Excluding securitisation positions deducted from CET1 capital.

(***) Efficient securitisation programmes only, see next paragraph.

PROPRIETARY SECURITISATION (ORIGINATOR)

The Group acts as an originator by securitising its own credit exposures in order to obtain new sources of financing and improve the liquidity of its balance sheet, and to reduce its risk and capital requirements.

Where the purpose of the transaction is solely to reduce risk, the Group will favour so-called "synthetic" securitisation transactions, ensuring the risk transfer of exposures (mortgages, consumer loans, corporate loans, etc.) through credit derivatives or guarantees. These transactions are initiated mainly by CIB in collaboration with the Retail Banking & Services business lines.

In the context of securitisation transactions carried out for financing purposes, the Group will favour so-called "cash" or "traditional" securitisations, characterised by the sale of securitised exposures to a specially created entity. These operations are initiated by the Group's ALM Treasury in collaboration with the businesses whose exposures are securitised in exchange for liquid assets eligible for central bank financing or included in the global liquidity reserve (see paragraph *Wholesale funding and liquidity reserve monitoring indicators* in section 5.8 *Liquidity risk*).

Risk transfer of own account securitisation transactions

The capital requirement of securitised credit exposures and securitisation positions depends on the risk transfer level of the transaction.

When the exposures securitised by the Group in the context of own-account securitisation transactions meet the Basel eligibility criteria, in particular that of significant risk transfer as defined in Regulation (EU) No. 2017/2401, they are excluded from the calculation of credit risk-weighted assets and the securitisation transaction is said to be efficient. In this case, only the positions retained by the institution and any commitments granted to the structure after securitisation are subject to risk-weighted assets calculation.

Exposures securitised through proprietary securitisation transactions that do not meet Basel eligibility criteria (inefficient securitisations) remain in their original prudential portfolio. Their capital requirement is calculated as if they were not securitised and is included in section 5.4 *Credit risk*.

Efficient securitisations

Exposures retained in securitisation positions originated by BNP Paribas amounted to EUR 30.2 billion at 31 December 2019, corresponding to positions in nineteen efficient securitisation programmes under Basel rules.

At 31 December 2019, the main securitisation transactions recognised as efficient are the following:

- a synthetic transaction initiated in 2019 by French Retail Banking concerning an EUR 7.5 billion portfolio of corporates loans;
- a synthetic transaction initiated in 2019 by Belgian Retail Banking concerning an EUR 4.2 billion portfolio of corporates loans;
- a synthetic transaction initiated in 2019 by BNL concerning an EUR 1.4 billion portfolio of consumer loans;
- a synthetic transaction initiated in 2018 by French Retail Banking concerning an EUR 10.7 billion portfolio of large corporates loans;
- a synthetic transaction initiated in 2018 by BNL concerning a EUR 2.2 billion portfolio of corporate loans;
- a classic transaction initiated in 2018 by Personal Finance concerning a EUR 1.0 billion portfolio of consumer loans;
- a synthetic transaction initiated in 2017 by French Retail Banking concerning an EUR 1.6 billion portfolio of large corporates loans;
- a synthetic transaction initiated in 2017 by CIB concerning a EUR 1.3 billion portfolio of corporate loans.

In addition, the Group held positions in four securitisation transactions implemented in 2019 by Personal Finance totalling EUR 0.3 billion, representing a EUR 3.8 billion portfolio of underlying assets in total.

BNP Paribas did not securitise for its own account revolving exposures subject to early amortisation treatment.

At 31 December 2019, there were no assets awaiting securitisation.

➤ TABLE 53: SECURITISED EXPOSURES BY BNP PARIBAS AS ORIGINATOR

In millions of euros	Securitised exposures originated by BNP Paribas	
	31 December 2019	31 December 2018
Traditional	**8,175**	**2,750**
of which IRB approach	5,071	1,673
of which standardised approach	3,104	1,076
Synthetic	**31,106**	**18,756**
of which IRB approach	29,415	18,756
of which standardised approach	1,690	0
TOTAL	**39,281**	**21,506**

TABLE 54: SECURITISED EXPOSURES BY BNP PARIBAS AS ORIGINATOR BY UNDERLYING ASSET CATEGORY(*)

Securitised exposures *In millions of euros*	31 December 2019			31 December 2018		
	Traditional	Synthetic	Total	Traditional	Synthetic	Total
Residential mortgages	17	-	17	20	2,351	2,371
Consumer loans	5,281	1,690	6,972	2,536	-	2,536
Credit card receivables	-	-	-	-	-	-
Loans to corporates	1,813	29,415	31,228	-	16,405	16,405
Trade receivables	-	-	-	-	-	-
Commercial mortgages	-	-	-	-	-	-
Finance leases	980	-	980	-	-	-
Other assets	84	-	84	194	-	194
TOTAL	**8,175**	**31,106**	**39,281**	**2,750**	**18,756**	**21,506**

(*) *This breakdown is based on the predominant underlying asset of the securitisation.*

Inefficient securitisations

Inefficient securitisation transactions are mainly carried out for refinancing purposes. These operations, which do not result in any risk transfer within the meaning of Regulation (EU) No. 2017/2401, do not have a diminishing effect on the calculation of risk-weighted assets. Securitised exposures are included in customer loans and subject to credit risk-weighted assets calculation.

As at 31 December 2019, BNP Paribas originated thirty-one securitisation transactions, for a total amount of EUR 65.2 billion of securitised exposures. The main transactions concern: BNP Paribas Fortis (EUR 37.5 billion), BNP Paribas Personal Finance (EUR 13.2 billion), French Retail Banking (EUR 12.6 billion) and BNL (EUR 1.7 billion).

In 2019, only one transaction without a significant risk transfer was completed by Personal Finance, for an amount of EUR 0.3 billion. The relevant exposures are therefore included in the section on credit risk (see section 5.4).

SECURITISATION ON BEHALF OF CLIENTS (SPONSOR)

As part of their third-party securitisation activity, CIB enables its large corporate and institutional clients to obtain attractive financing conditions directly from the financing markets, through multiple conduits (short-term refinancing markets) or specific structured operations (medium and long-term refinancing).

TABLE 55: SECURITISED EXPOSURES BY BNP PARIBAS AS SPONSOR(*) BY UNDERLYING ASSET CATEGORY(**)

Securitised exposures *In millions of euros*	31 December 2019			31 December 2018 Proforma		
	Traditional	Synthetic	Total	Traditional	Synthetic	Total
Residential mortgages	2,044		**2,044**	87		**87**
Consumer loans	6,768		**6,768**	5,077		**5,077**
Credit card receivables	2,526		**2,526**	1,805		**1,805**
Loans to corporates	486		**486**	2,698		**2,698**
Trade receivables	5,836		**5,836**	4,943		**4,943**
Commercial mortgages	34		**34**	54		**54**
Finance leases	3,638		**3,638**	4,108		**4,108**
Other assets	758		**758**	419		**419**
TOTAL	**22,090**	**-**	**22,090**	**19,192**	**-**	**19,192**

(*) *Within the securitised exposures by the Group as a sponsor, EUR 6 million correspond to exposures were included in BNP Paribas' balance sheet at 31December 2019 (compared with EUR 18 million at 31 December 2018).*
(**) *This breakdown is based on the predominant underlying asset of the securitisation.*

The financing structures thus put in place are accompanied by liquidity lines and, where appropriate, by the granting of guarantees by the Group, which are subject to a capital requirement. Commitments and positions retained or acquired by BNP Paribas on securitisation programmes as sponsor, amounted to EUR 22.1 billion at 31 December 2019.

Short-term refinancing

At 31 December 2019, two consolidated multiseller conduits (Starbird and Matchpoint) were sponsored by the Group. These conduits, by seeking refinancing on the local short-term commercial paper market, are able to provide CIB clients, large corporates and institutions with an attractive financing solution in exchange for some of their assets (trade receivables, commercial and industrial loans, finance leases for automobiles or various equipment, credit card receivables, etc.).

BNP Paribas provides each of these conduits with a liquidity line which amounted to EUR 20.4 billion at 31 December 2019, compared with EUR 16.1 billion at 31 December 2018.

Medium/long-term refinancing

In Europe and North America, the BNP Paribas Group's structuring platform provides securitisation solutions to its clients, based on products adapted to current conditions in terms of risk and liquidity. Altogether, the facilities granted by the Group through these transactions amounted to EUR 1.8 billion at 31 December 2019, compared with EUR 2.9 billion at 31 December 2018.

SECURITISATION AS INVESTOR

The securitisation positions of BNP Paribas as an investor amounted to EUR 8.9 billion at 31 December 2019, compared with EUR 5.5 billion at 31 December 2018.

Investments made by the Group in third-party securitisation transactions are mainly concentrated in Capital markets, a joint-venture between Corporate Banking and Global Market with an exposure of EUR 7.9 billion at 31 December 2019 compared to EUR 4.1 billion at 31 December 2018. Capital Markets is involved in setting up, then financing and hedging (as a "swap" supplier) structured asset financing operations initiated by its clients, including mainly institutions, large companies or private equity platforms.

Investor securitisation exposures also include historical positions within the BNP Paribas Fortis entity managed in run-off. This portfolio, housed in the Corporate Center, amounted to EUR 1.0 billion at 31 December 2019 compared with EUR 1.3 billion at 31 December 2018.

ACCOUNTING METHODS [Audited]

(See note 1 to the consolidated financial statements – *Summary of significant accounting policies applied by the Group*).

The accounting classification of securitisation positions in the banking book is shown in Table 11: *Prudential balance sheet by risk type (EU LI1-B)*.

Securitisation positions classified as "Financial assets at amortised cost" are measured using the method described in note 1.e.1 to the financial statements: the effective interest rate used to recognise interest income is measured on the basis of an expected cash flow model. From the outset, these positions are subject to an impairment calculation for expected credit risk losses (see note 1.e.5).

Securitisation positions classified on an accounting basis as "Financial assets at fair value through equity" are measured using the method described in note 1.e.2 to the financial statements. Changes in fair value determined according to the principles listed in note 1.e.10 to the financial statements (excluding revenue recognised using the effective interest method) are presented in a specific subsection of shareholders' equity along with expected credit risk losses calculated using the methods described in note 1.e.5 to the financial statements. Upon disposal, amounts previously recognised in recyclable equity are transferred to the profit and loss account.

Securitisation positions classified on an accounting basis as "Financial instruments at fair value through profit or loss" are measured using the method described in note 1.e.7 to the financial statements.

Proceeds from the sale of securitisation positions are recognised in accordance with rules for the category of origin of positions sold.

Synthetic securitisations in the form of credit derivatives (credit default swaps) or guarantees received follow accounting rules appertaining respectively:

- to trading portfolio derivatives. These are measured at fair value through profit or loss (see note 1.e.7 to the financial statements);
- to financial guarantees received, which cannot be considered as forming an integral part of secured assets. If it is virtually certain that a loss caused by a defaulting debtor will be offset by the guarantor, the guarantee is then recognised as a reimbursement asset (right to reimbursement for expected credit losses) and expected credit losses on the asset are, at the same time, recognised in profit or loss. The overall impact in terms of profit or loss is the same as if the guarantee had been recognised in the measurement of expected credit losses, with the difference that the guarantee received is shown as a reimbursement asset rather than as a reduction in the expected credit losses on the asset.

Assets awaiting securitisation are classified as:

- financial instruments at amortised cost or at fair value through equity and in the prudential banking book in the case of exposures resulting from the bank's balance sheet, for which the Bank will be originator in the future securitisation within the meaning of Basel 3;
- financial instruments at fair value through profit or loss and in the prudential banking book in the case of exposures purchased and put into warehousing, for which the bank will be sponsor in the future securitisation within the meaning of regulation.

SECURITISATION RISK MANAGEMENT

The risk management framework for securitisation is part of the risk management described in section 5.3.

The business lines represents the first line of defence with responsibility for understanding all the risks incurred in order to ensure correct evaluation. RISK acts independently, as a second line of defence.

Positions taken are monitored to measure changes in individual and portfolio risks.

The monitoring of securitised assets covers credit, counterparty, market and liquidity risks on the underlying assets.

CREDIT RISK ON SECURITISED ASSETS

Securitisation assets outside the trading book are subject to specific approval by the Credit Committees. For new transactions, a credit proposal is prepared by the business, and a comprehensive risk analysis is carried out by the RISK analysts before presentation to the Credit Committee. All approvals are subject to an annual review. Exposures are monitored to ensure that they do not exceed the limits set by the Credit Committees.

The risk exposure of securitisation tranches is intrinsically linked to that of the underlying assets, whether for securitisation or re-securitisation. Through the customary governance of Credit Committees, the Group monitors changes in the quality of underlying assets for the entire duration of the programme concerned.

COUNTERPARTY RISK ON SECURITISATION RELATED TO INTEREST RATES OR FX DERIVATIVES

Securitisation-related derivative instruments are also subject to the approval of the Credit Committees. BNP Paribas integrates counterparty risk into the securitisation structure. The principles are the same as those described above in respect of credit risk.

MARKET RISK WITHIN THE BANKING BOOK

On fixed rate ABS positions, a macro hedge consisted of fixed/variable rate swaps is put in place to cover interest rate risk. The hedge is recorded in accordance with the rules of hedge accounting.

LIQUIDITY/FUNDING RISK

Securitisation positions are financed internally by the ALM – Treasury or via conduits sponsored by BNP Paribas.

SECURITISATION POSITIONS

TABLE 56: SECURITISATION POSITIONS IN THE BANKING BOOK BY TYPE OF ASSET(*) (EU SEC1)

In millions of euros	31 December 2019												
	Originator				Sponsor				Investor				
	Traditional	*of which STS*	Synthetic	Total	Traditional	*of which STS*	Synthetic	Total	Traditional	*of which STS*	Synthetic	Total	Total
Retail exposures	**1,250**	***225***	**1,411**	**2,661**	**11,395**	**-**	**-**	**11,395**	**3,785**	**-**	**-**	**3,785**	**17,842**
Residential mortgages	15	-	-	15	2,074	-	-	2,074	2,829	-	-	2,829	**4,918**
Credit card receivables	-	-	-	-	2,549	-	-	2,549	20	-	-	20	**2,569**
Other retail exposures	1,236	*225*	1,411	2,647	6,773	-	-	6,773	936	-	-	936	**10,355**
Of which re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Corporates exposures	**72**	**-**	**27,482**	**27,554**	**10,750**	**-**	**-**	**10,750**	**5,130**	**-**	**-**	**5,130**	**43,434**
Loans to corporates	15	-	27,482	27,497	481	-	-	481	4,813	-	-	4,813	**32,791**
Commercial mortgages	-	-	-	-	34	-	-	34	-	-	-	-	**34**
Finance leases	56	-	-	56	3,642	-	-	3,642	141	-	-	141	**3,839**
Other assets	1	-	-	1	6,593	-	-	6,593	176	-	-	176	**6,770**
Of which re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	**-**
TOTAL	**1,323**	***225***	**28,893**	**30,216**	**22,145**	**-**	**-**	**22,145**	**8,915**	**-**	**-**	**8,915**	**61,276**

(*) *Based on the predominant asset class in the asset pool of the securitisation in which the position is held.*

In millions of euros	31 December 2018												
	Originator				Sponsor				Investor				
	Traditional	*of which STS*	Synthetic	Total	Traditional	*of which STS*	Synthetic	Total	Traditional	*of which STS*	Synthetic	Total	Total
Retail exposures	**1,379**	**-**	**2,216**	**3,595**	**7,020**	**-**	**-**	**7,020**	**3,619**	**-**	**-**	**3,619**	**14,234**
Residential mortgages	18	-	2,216	2,234	118	-	-	118	2,155	-	-	2,155	**4,507**
Credit card receivables	-	-	-	-	1,826	-	-	1,826	40	-	-	40	**1,866**
Other retail exposures	1,361	-	-	1,361	5,077	-	-	5,077	1,425	-	-	1,425	**7,863**
Of which re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Corporates exposures	**1**	**-**	**15,323**	**15,324**	**12,201**	**-**	**-**	**12,201**	**1,848**	**-**	**-**	**1,848**	**29,373**
Loans to corporates	-	-	15,323	15,323	2,678	-	-	2,678	1,587	-	-	1,587	**19,588**
Commercial mortgages	-	-	-	-	54	-	-	54	-	-	-	-	**54**
Finance leases	-	-	-	-	4,115	-	-	4,115	182	-	-	182	**4,297**
Other assets	1	-	-	1	5,355	-	-	5,355	79	-	-	79	**5,435**
Of which re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	**-**
TOTAL	**1,380**	**-**	**17,539**	**18,919**	**19,222**	**-**	**-**	**19,222**	**5,467**	**-**	**-**	**5,467**	**43,608**

(*) *Based on the predominant asset class in the asset pool of the securitisation in which the position is held.*

TABLE 57: SECURITISATION POSITIONS, EXPOSURE IN DEFAULT AND PROVISIONS BY UNDERLYING ASSET'S GEOGRAPHIC REGION(*)

	31 December 2019				
		EAD in default			
In millions of euros	EAD	Standardised approach	IRB approach	Total	Stage 3 provisions
Europe	47,144	33	-	33	-
North America	13,088	-	12	12	(3)
Asia Pacific	986	-	-	-	-
Rest of the world	58	-	-	-	-
TOTAL	**61,276**	**33**	**12**	**45**	**(3)**

	31 December 2018 Proforma				
		EAD in default			
In millions of euros	EAD	Standardised approach	IRB approach	Total	Stage 3 provisions
Europe	31,272	24	-	24	(5)
North America	11,511	-	20	20	(5)
Asia Pacific	740	-	-	-	-
Rest of the world	84	-	-	-	-
TOTAL	**43,608**	**24**	**20**	**44**	**(10)**

(*) *This breakdown is based on the predominant underlying asset of the securitisation.*

TABLE 58: BANKING BOOK SECURITISATION POSITION QUALITY

In millions of euros	Securitisation positions held or acquired (EAD)	
Tranche quality	**31 December 2019**	**31 December 2018**
Senior tranche	60,520	43,042
Mezzanine tranche	720	442
First-loss tranche	35	124
TOTAL	**61,276**	**43,608**

At 31 December 2019, 99% of the securitisation positions held or acquired by the Group were senior tranches, stable compared with 31 December 2018, reflecting the high quality of the Group's portfolio.

RISK-WEIGHTED ASSETS

On 1 January 2019, the revised securitisation framework came into force with the application of Regulation (EU) No. 2017/2401 and Regulation (EU) No. 2017/2402. This new framework provides for:

- a transitional period from 1 January 2019 to 31 December 2019 during which the provisions of Regulation (EU) No. 575/2013 continue to apply for programmes initiated until 31 December 2018;
- the creation of a specific status for programmes known as Simple, Transparent and Standardised, which comply with certain conditions:
  - the portfolio of underlying assets, which must be uniform in terms of asset type, may not include a re-securitisation position nor defaulting asset at origination,
  - the programme must be traditional and the payment of the interest for the securitisation positions must be based on standard benchmark interest rates,
  - investors must have sufficient information on the portfolio of underlying assets, specifically, information on the histories of defaults and losses,

  Subject to eligibility in terms of applicable risk-weight and concentration of the underlying asset portfolio, these programmes may benefit from preferential weightings;
- new approaches for the calculation of risk-weighted assets related to applicable securitisation positions according to the specificities of the underlying portfolio:
  - **internal ratings-based approach (SEC-IRBA)**: the risk-weight applicable to the securitisation position depends on the one hand on the characteristics of the securitisation programme and on the other hand on the capital charge of the underlying portfolio calculated as credit risk,
  - **standardised approach (SEC-SA)**: the risk-weight applicable to the securitisation position depends on the characteristics of the securitisation programme, the capital charge of the underlying portfolio calculated as credit risk and the proportion of assets in default in this portfolio,
  - **external ratings-based approach (SEC-ERBA)**: the risk-weight applicable to the securitisation position is given directly by a correspondence table defined in Regulation (EU) No 2017/2401, based on the external rating of the tranche, its subordination rank and its maturity. BNP Paribas uses the external ratings of the Standard & Poor's, Moody's, Fitch and DBRS rating agencies,
  - in other cases, Regulation (EU) No. 2017/2401 provides for the deduction of CET1 own funds.

As a reminder, the approaches for calculating risk-weighted assets described in Regulation No. 575/2013 are as follows:

- **standardised approach**: the amount of risk-weighted assets is calculated by applying to the exposure at default, the weighting associated regulatorily with the external rating of the securitisation position, or in a very limited number of cases, by applying a weighting by transparency. For positions with a rating of B+ or less or without an external rating, the rules provide for deduction from Common Equity Tier 1 capital;
- **IRBA approach**: risk-weighted assets under the IRBA approach are calculated using one of the following methods:
  - for exposures with an external rating, the applicable risk-weight is directly given by the use of a concordance table provided by Regulation (EU) No. 575/2013,
  - for exposures with no external rating, when the Group is the originator or sponsor, the regulatory formula method may apply. The exposure risk weight is calculated using a formula defined in Regulation (EU) No. 575/2013, based on the internal credit rating of the underlying portfolio and the structuring of the transaction,
  - in other cases, the rules provide for the deduction of Common Equity Tier 1.

At 31 December 2019, risk-weighted assets calculated according to the methods described in Regulation (EU) No. 575/2013 represented EUR 4.8 billion.

TABLE 59: SECURITISATION POSITIONS AND RISK-WEIGHTED ASSETS BY APPROACH

In millions of euros	31 December 2019		31 December 2018		Variation	
	Securitisation positions held or acquired (EAD)	Risk-weighted assets	Securitisation positions held or acquired (EAD)	Risk-weighted assets	Securitisation positions held or acquired (EAD)	Risk-weighted assets
Internal ratings-based approach (SEC-IRBA)	21,170	4,324	-	-	21,170	4,324
Standardised approach (SEC-SA)	324	1,257	-	-	324	1,257
External ratings-based approach (SEC-ERBA)	5,195	177	-	-	5,195	177
IRBA approach	33,644	4,352	41,534	5,976	(7,890)	(1,624)
Standardised approach	944	400	2,075	1,064	(1,131)	(664)
TOTAL	**61,276**	**10,510**	**43,608**	**7,040**	**17,668**	**3,470**

Risk-weighted assets corresponding to securitisation positions held or acquired by the Group amounted to EUR 10.5 billion at 31 December 2019, or 1.6% of BNP Paribas total risk-weighted assets, compared with EUR 7.0 billion at 31 December 2018 (1.1% of Group total risk-weighted assets).

TABLE 60: SECURITISATION RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER

In millions of euros	31 December 2018	Key driver							Total variation	31 December 2019
		Asset size	Asset quality	Model updates	Methodology and policy	Acquisitions and disposals	Currency	Other		
RWAs - Securitisation	7,040	3,571	(103)	-	-	15	164	(177)	3,470	10,510

The change in risk-weighted assets in 2019 can be explained mainly by the implementation of three synthetic securitisation transactions recognised as efficient in the loan portfolios of French Retail Banking, Belgian Retail Banking and BNL (see the paragraph on *Proprietary securitisation (originator)*).

TABLE 61: SECURITISATION POSITIONS AND RISK-WEIGHTED ASSETS – BNP PARIBAS ACTING AS ORIGINATOR OR AS SPONSOR (EU SEC3)

	31 December 2019													
	Securitisation positions (EAD) by risk weight				Securitisation positions (EAD) by approach					Risk-weighted assets				
In millions of euros	≤ 20%	> 20% ≤ 50%	> 50% ≤ 100%	> 100% < 1,250%	SEC-IRBA	SEC-SA	SEC-ERBA	IRBA approach	Standardised approach	SEC-IRBA	SEC-SA	SEC-ERBA	IRBA approach	Standardised approach
Traditional securitisation	**20,530**	**1,442**	**1,421**	**75**	**5,151**	**3,707**	**269**	**14,280**	**61**	**1,186**	**1,020**	**167**	**2,415**	**44**
Securitisation	20,530	1,442	1,421	75	5,151	3,707	269	14,280	61	1,186	1,020	167	2,415	44
Retail underlying	*11,419*	*969*	*236*	*21*	*2,816*	*2,467*	*193*	*7,121*	*48*	*665*	*457*	*82*	*864*	*29*
of which STS	*206*	*3*	*3*	*14*	*139*	*42*	*45*	-	-	*66*	*4*	*24*	-	-
Corporate underlying	*9,111*	*473*	*1,185*	*54*	*2,335*	*1,240*	*76*	*7,158*	*13*	*521*	*563*	*85*	*1,552*	*15*
of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Synthetic securitisation	**28,830**	**-**	**-**	**63**	**11,696**	**1,411**	**-**	**15,786**	**-**	**2,283**	**222**	**-**	**1,401**	**-**
Securitisation	28,830	-	-	63	11,696	1,411	-	15,786	-	2,283	222	-	1,401	-
Retail underlying	*1,411*	-	-	-	-	*1,411*	-	-	-	-	*222*	-	-	-
Corporate underlying	*27,419*	-	-	*63*	*11,696*	-	-	*15,786*	-	*2,283*	-	-	*1,401*	-
Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	**49,360**	**1,442**	**1,421**	**138**	**16,848**	**5,118**	**269**	**30,065**	**61**	**3,469**	**1,242**	**167**	**3,816**	**44**

	31 December 2018													
	Securitisation positions (EAD) by risk weight				Securitisation positions (EAD) by approach					Risk-weighted assets				
In millions of euros	≤ 20%	> 20% ≤ 50%	> 50% ≤ 100%	> 100% < 1,250%	SEC-IRBA	SEC-SA	SEC-ERBA	IRBA approach	Standardised approach	SEC-IRBA	SEC-SA	SEC-ERBA	IRBA approach	Standardised approach
Traditional securitisation	**18,214**	**367**	**1,959**	**62**				**19,939**	**662**				**3,448**	**500**
Securitisation	18,214	367	1,959	62				19,939	662				3,448	500
Retail underlying	*7,491*	*54*	*816*	*38*				*7,756*	*643*				*952*	*475*
of which STS														
Corporate underlying	*10,723*	*313*	*1,143*	*23*				*12,183*	*20*				*2,496*	*25*
of which STS														
Re-securitisation	-	-	-	-				-	-				-	-
Synthetic securitisation	**17,487**	-	-	**52**				**17,539**	-				**1,726**	-
Securitisation	17,487	-	-	52				17,539	-				1,726	-
Retail underlying	*2,216*	-	-	-				*2,216*	-				*155*	-
Corporate underlying	*15,271*	-	-	*52*				*15,323*	-				*1,571*	-
Re-securitisation	-	-	-	-				-	-				-	-
TOTAL	**35,701**	**367**	**1,959**	**114**				**37,479**	**662**				**5,174**	**500**

TABLE 62: SECURITISATION POSITIONS AND RISK-WEIGHTED ASSETS – BNP PARIBAS ACTING AS INVESTOR (EU SEC4)

In millions of euros	31 December 2019													
	Securitisation positions (EAD) by risk weight				Securitisation positions (EAD) by approach					Risk-weighted assets				
	≤ 20%	> 20% ≤ 50%	> 50% ≤ 100%	> 100% < 1,250%	SEC-IRBA	SEC-SA	SEC-ERBA	IRBA approach	Standardised approach	SEC-IRBA	SEC-SA	SEC-ERBA	IRBA approach	Standardised approach
Traditional securitisation	**6,607**	**2,193**	**41**	**73**	**4,322**	**77**	**55**	**3,578**	**883**	**855**	**15**	**10**	**536**	**355**
Securitisation	6,607	2,193	41	73	4,322	77	55	3,578	883	855	15	10	536	355
Retail underlying	*2,472*	*1,258*	*41*	*14*	*954*	*77*	*-*	*1,893*	*861*	*191*	*15*	*-*	*338*	*330*
of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corporate underlying	*4,135*	*936*	*-*	*59*	*3,368*	*-*	*55*	*1,685*	*21*	*665*	*-*	*10*	*199*	*26*
of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Synthetic securitisation	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corporate underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	**6,607**	**2,193**	**41**	**73**	**4,322**	**77**	**55**	**3,578**	**883**	**855**	**15**	**10**	**536**	**355**

In millions of euros	31 December 2018													
	Securitisation positions (EAD) by risk weight				Securitisation positions (EAD) by approach					Risk-weighted assets				
	≤ 20%	> 20% ≤ 50%	> 50% ≤ 100%	> 100% < 1,250%	SEC-IRBA	SEC-SA	SEC-ERBA	IRBA approach	Standardised approach	SEC-IRBA	SEC-SA	SEC-ERBA	IRBA approach	Standardised approach
Traditional securitisation	**3,803**	**1,476**	**59**	**129**				**4,055**	**1,412**				**802**	**564**
Securitisation	3,803	1,476	59	129				4,055	1,412				802	564
Retail underlying	*2,071*	*1,440*	*58*	*50*				*2,230*	*1,390*				*430*	*532*
of which STS														
Corporate underlying	*1,732*	*36*	*1*	*79*				*1,825*	*23*				*372*	*32*
of which STS														
Re-securitisation	-	-	-	-				-	-				-	-
Synthetic securitisation	**-**	**-**	**-**	**-**				**-**	**-**				**-**	**-**
Securitisation	-	-	-	-				-	-				-	-
Retail underlying	-	-	-	-				-	-				-	-
Corporate underlying	-	-	-	-				-	-				-	-
Re-securitisation	-	-	-	-				-	-				-	-
TOTAL	**3,803**	**1,476**	**59**	**129**				**4,055**	**1,412**				**802**	**564**

Guarantees on securitisation positions amounted to EUR 1.1 billion as at 31 December 2019, stable compared to 31 December 2018.

5.6 Counterparty credit risk

Counterparty credit risk is the translation of the credit risk embedded in financial transactions, investments and/or settlement transactions between counterparties. Those transactions include bilateral contracts such as over-the-counter (OTC) derivatives contracts as well as contracts settled through clearing houses. The amount of this risk may vary over time in line with changing market parameters which then impacts the replacement value of the relevant transactions.

Counterparty risk lies in the event that a counterparty defaults on its obligations to pay the Bank the full present value of the flows relating to a transaction or a portfolio for which the Bank is a net receiver. Counterparty credit risk is also linked to the replacement cost of a derivative or portfolio in the event of counterparty default. Hence, it can be seen as a market risk in case of default or a contingent risk.

In respect of counterparty risk, the RISK Function is structured according to five main priorities:

- measuring exposure to counterparty credit risk;
- checking and analysing these exposures and the limits that apply to them;
- introducing mechanisms to reduce risk;
- calculating and managing credit valuation adjustments (CVA);
- defining and implementing stress tests.

COUNTERPARTY CREDIT RISK VALUATION

COUNTERPARTY EXPOSURE CALCULATION

Exposure to counterparty risk is measured using two approaches:

Modelled exposure – Internal model method

With regard to modelling counterparty risk exposure, the exposure at default (EAD) for counterparty risk is calculated based on the Effective Expected Positive Exposure (EEPE) indicator multiplied by the alpha regulatory factor as defined in article 284-4 of Regulation (EU) No. 575/2013. The Effective Expected Positive Exposure (EEPE) is measured using an internal exposure valuation model to determine exposure profiles. The model was developed by the Group and approved by the supervisor.

The principle of the model is to simulate the main risk factors, such as commodity and equity prices, interest rates and foreign exchange rates, affecting the counterparty risk exposure, based on their initial respective values. The Bank uses Monte-Carlo simulations to generate thousands of time trajectories (corresponding to thousands of potential market scenarios) to define potential changes in risk factors. The diffusion processes used by the model are calibrated on the most recent historic data set over a four-year period.

Based on all the risk factor simulations, the model assesses the value of the positions from the simulation date to the transaction maturity date (from one day to more than thirty years for the longest-term transactions) to generate an initial set of exposure profiles.

Exposure may be reduced by a Master Agreement, and may also be covered by a Credit Support Annex (CSA). For each counterparty, the model aggregates the exposures taking into consideration any netting agreements and credit support annexes, as well as the potentially risky nature of the collateral exchanged.

Based on the breakdown of exposure to the counterparty, the model determines the following in particular:

- the average risk profile, the Expected Positive Exposure (EPE), from which the EEPE (Effective Expected Positive Exposure) is calculated:

  The Expected Positive Exposure (EPE) profile is calculated as the average of the breakdown of counterparty exposures at each point in the simulation, with the negative portions of the trajectories set to zero (the negative portions correspond to situations where BNP Paribas Group is a risk for the counterparty). The EEPE is calculated as the first-year average of the non-decreasing EPE profile: at each simulation date, the value taken is the maximum of the EPE value and the value on the previous simulation date;
- the Potential Future Exposure (PFE) profile:

  The Potential Future Exposure (PFE) profile is calculated as a 90% percentile of the breakdown of exposure to the counterparty at each point in the simulation. This percentile is raised to 99% for hedge fund counterparties. The highest Potential Future Exposure value (Max PFE) is used to monitor maximum limits.

Since 1 January 2014, date of entry into force of Regulation (EU) No. 575/2013, the system for measuring exposures to counterparty risk takes into account:

- extension of the margin periods of risk in accordance with article 285 of the CRR;
- inclusion of the specific correlation risk;
- determination of a stressed EEPE calculated based on a calibration reflecting a particular period of stress.

Non-modelled exposure – Mark-to-market method

For non-modelled counterparty credit risk exposures, the exposure at default is based on market price evaluation (Net Present Value + Add-On). The add-on is calculated in accordance with article 274 of Regulation (EU) No. 575/2013 as a fixed percentage according to the type of transaction and its remaining life.

LIMIT/MONITORING FRAMEWORK

Limits reflecting the principles of the Group's Risk Appetite Statement are defined for the counterparty credit risk. These limits are set in accordance with the type of counterparty (banks, institutional investors, asset managers, hedge funds, corporates). For each counterparty, the maximum Potential Future Exposure value (MaxPFE) calculated by the internal model is compared on a daily basis with the limits assigned to each counterparty to check compliance with credit decisions.

These limits are defined and calibrated as part of the risk approval process. They are approved in the following committees (listed in ascending order of discretionary authority): Local Credit Committee, Regional Credit Committee, Global Credit Committee, General Management Credit Committee.

These measures are complemented by sets of directives (covering contingent market risk sensitivities per counterparty which are extracted from the market risk system) which provide further tools in the monitoring of counterparty credit risk and the prevention of systemic risk concentrations.

MITIGATION OF COUNTERPARTY CREDIT RISK

As part of its risk management, the BNP Paribas Group implemented three counterparty risk mitigation mechanisms:

- the signature of netting agreements for OTC transactions;
- clearing through central counterparties, in the case of OTC or listed derivative transactions.
- Bilateral initial margin exchange

Netting agreements

Netting is used by the Bank in order to mitigate counterparty credit risk associated with derivatives trading. The main instance where netting occurs is in case of trades termination: if the counterparty defaults, all the trades are terminated at their current market value, and all the positive and negative market values are summed to obtain a single amount (net) to be paid to or received from the counterparty. The balance ("close-out netting") may be collateralised with cash, securities or deposits.

The Bank also applies settlement netting in order to mitigate counterparty credit risk in cases of currency settlement. This corresponds to the netting of all payments and receipts between the Bank and one counterparty in the same currency to be settled in the same day. The netting results in a single amount (for each currency) to be paid either by the Bank or by the counterparty.

Transactions affected by this are processed in accordance with bilateral or multilateral agreements respecting the general principles of the national or international framework. The main forms of bilateral agreements are those issued by *Fédération Bancaire Française* (FBF) and on an international basis by the International Swaps and Derivatives Association (ISDA).

Trade clearing through central counterparties

Trade clearing through central counterparties (CCPs) is part of BNP Paribas usual capital market activities. As a global clearing member, BNP Paribas contributes to the risk management framework of the CCPs through payment to a default fund as well as daily margin calls. The rules which define the relationships between BNP Paribas and the CCPs of which it is a member are described in each CCP's rulebook.

For Europe and the U.S. in particular, this scheme enables the reduction of notional amounts through the netting of the portfolio, on one hand, and, on the other, a transfer of the risk from several counterparties to a single central counterparty with a robust risk management framework.

In its clearing for third parties activity, BNP Paribas requests as well, and on a daily basis, the payment of margin calls from its clients.

Since default by one or more clearing houses would affect BNP Paribas, it has introduced dedicated monitoring of these central counterparties and closely tracks concentrations with them.

Bilateral initial margin exchange

Regulation (EU) No. 648/2012 (EMIR) stipulates the establishment of additional constraints for players in the derivatives markets, including the obligation to exchange collateral for contracts that are not centrally cleared. An initial guarantee deposit must be made by the Bank's most significant financial and non-financial counterparties. The purpose of this exchange is to mitigate the counterparty credit risk associated with over-the-counter derivatives trading that is not centrally cleared. The Bank's transactions with sovereign borrowers, central banks, and supranational entities are excluded from this system.

If the counterparty defaults, all the trades are terminated at their current market value by the Bank. The initial guarantee deposit hedges the variation in transactions during this liquidation period. The initial deposit reflects an extreme but plausible estimate of potential losses corresponding to an unilateral interval of confidence of 99% over a ten-day period, based on historic data including an episode of significant financial tensions.

The initial deposit must be bilaterally traded on a gross basis between the Bank and the counterparty. It is kept by a third party so as to guarantee that the Bank immediately has access to the counterparty's deposit and that the Bank's deposit be protected in case the counterparty defaults.

CREDIT VALUATION ADJUSTMENTS (CVA)

The valuation of financial OTC-trades carried out by BNP Paribas as part of its trading activities (mainly Global Markets) includes Credit Valuation Adjustments (CVA). CVA is an adjustment of the trading portfolio valuation to take into account each counterparty's credit risk. It is the fair value on any expected loss arising from counterparty exposure based on the potential positive value of the contract, the counterparty default probability and the estimated recovery rate in case of default.

The majority of counterparty credit risk exposures on derivatives are related to the Group's interest rate, credit and foreign exchange activities, all underlying assets, and all business lines combined.

The credit valuation adjustment is not only a function of the expected exposure but also the credit risk level of the counterparty, which is linked to the level of the Credit Default Swaps (CDS) spreads used in the default probability calculation.

In order to reduce the risk associated with the credit quality deterioration embedded in a financial operations portfolio, BNP Paribas uses a dynamic hedging strategy, involving the purchase of market instruments such as credit derivative instruments. (See *CVA risk management* in section *Counterparty risk management*).

Risk related to the volatility of CVAs (CVA risk)

To protect banks against the risk of losses due to CVA variations, Regulation (EU) No. 575/2013 introduced a dedicated capital charge, the CVA charge. This charge aims at capitalising the risk of loss caused by changes in the credit spread of a counterparty to which the BNP Paribas Group is exposed. The CVA charge is computed by the Group using mainly the advanced method and relies on the Bank's model on market risk (see section *CVA Risk* hereafter).

STRESS TESTS AND WRONG WAY RISK

The BNP Paribas counterparty risk stress testing framework is consistent with the market risk framework (see section 5.7 *Market risk related to trading activities*). As such, the counterparty stress testing framework is implemented in conjunction with the market risk stress testing and employs consistent market shifts where scenarios are shared. Testing also comprises factors specific to counterparty risk such as deteriorations in counterparty credit quality.

Such risk analysis is present within the Executive Management reporting framework which shares some common forums with the market risk reporting set up such as the CMRC, core risk committee for market and counterparty credit risk. Both counterparty and market risk stress testing frameworks are governed by the Stress Testing Steering Committee.

Wrong Way Risk (or unfavourable correlation risk) is the case of exposure to a counterparty being inversely correlated with the counterparty's credit quality.

Such risk can be split in two parts:

- General Wrong Way Risk (GWWR), which corresponds to the risk that the probability of default by counterparty is positively correlated with general market risk factors;
- Specific Wrong Way Risk (SWWR), which corresponds to the risk arising when future exposure to a specific counterparty is positively correlated with the counterpart's probability of default due to the nature of the transactions with the counterparty or of the collateral received.

BNP Paribas' monitoring and analysis of General Wrong Way Risk is performed through stress tests that highlight the risk factors negatively correlated with the counterparty's credit quality. It combines a top down approach and a bottom up approach:

- for the top down approach, the GWWR policy defines the generic rules and criteria to be used to detect GWWR. These criteria are based on the countries of incorporation of the counterparties, the region of which they are part and the industries in which they are involved. Derivative positions, structured financing, and collateral that counterparties may have with BNP Paribas have been defined as the situations where GWWR should be analysed and reported;
- the GWWR framework relies upon a robust bottom up approach with the expertise of the counterparty credit analysts specifically needed to define the most impacting scenarios at portfolio level (the approach consists of the use of stressed market parameters reflecting extreme but realistic conditions).

When a legal link between the exposure underlyings and the counterparty is established, the SWWR is subject to prescribed regulatory capital treatment.

EXPOSURE TO COUNTERPARTY CREDIT RISK

The table below shows exposure to counterparty credit risk (measured as the exposure at default) by Basel asset class on derivatives contracts and securities lending/borrowing transactions, after the impact of any netting agreement. Bilateral transactions between the Bank and customers (bilateral counterparty risk) are distinguished from transactions related to the clearing activities of the Bank, including essentially exposures to central counterparties (CCP).

➤ TABLE 63: COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT BY ASSET CLASS (EXCL. CVA RISK CHARGE)

EAD *In millions of euros*	31 December 2019			31 December 2018			Variation
	IRBA	Standardised approach	Total	IRBA	Standardised approach	Total	Total
Bilateral counterparty credit risk	**125,501**	**1,259**	**126,761**	**103,699**	**1,243**	**104,942**	**21,819**
Central governments and central banks	37,751	2	37,753	25,393	2	25,395	12,358
Corporates	67,660	978	68,638	56,656	846	57,502	11,136
Institutions(*)	20,091	246	20,336	21,649	390	22,039	(1,703)
Retail	0	33	33	0	5	5	28
Exposure to CCP related to clearing activities	**3,736**	**36,580**	**40,316**	**3,060**	**37,358**	**40,419**	**(102)**
TOTAL	**129,238**	**37,839**	**167,077**	**106,759**	**38,601**	**145,360**	**21,717**

(*) *Institutions asset class comprises credit institutions and investment firms, including those recognised in other countries, it also includes some exposures to regional and local authorities, public sector agencies and multilateral development banks that are not treated as central government authorities.*

For bilateral counterparty credit risk, the share of exposures under the IRB approach represented 99% at 31 December 2019, stable compared with 31 December 2018.

The following table summarises the exposures to counterparty credit risk with a breakdown by product. An indication of the Group's business volume on derivative financial instruments booked in the trading portfolio is presented in note 5.a to the consolidated financial statements.

➤ TABLE 64: COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT BY PRODUCT (EXCL. CVA RISK CHARGE)

EAD *In millions of euros*	31 December 2019					31 December 2018				
	Bilateral counterparty credit risk		Exposure to CCP related to clearing activities		Total	Bilateral counterparty credit risk		Exposure to CCP related to clearing activities		Total
OTC derivatives	83,142	91.7%	7,570	8.3%	90,712	71,349	88.4%	9,382	11.6%	80,731
Securities Financing Transactions	43,619	88.2%	5,834	11.8%	49,453	33,593	96.1%	1,378	3.9%	34,971
Listed derivatives			23,108	100.0%	23,108			26,513	100.0%	26,513
Default fund contribution			3,804	100.0%	3,804			3,145	100.0%	3,145
TOTAL	**126,761**	**75.9%**	**40,316**	**24.1%**	**167,077**	**104,942**	**72.2%**	**40,419**	**27.8%**	**145,360**

BILATERAL COUNTERPARTY CREDIT RISK

The bilateral counterparty risk corresponds to the contracts treated bilaterally (or over-the-counter) by BNP Paribas with its clients.

The exposure at default (EAD) is primarily measured with the aid of internal models (see paragraph *Counterparty exposure calculation*). For the perimeter not covered by internal models (limited mainly to subsidiaries BNL, BancWest and TEB), EAD is calculated using the Mark-to-Market method (Net Present Value + Add-On).

Risk-weighted assets linked to counterparty credit risk are computed by multiplying EAD by an appropriate weighting according to the approach used (standardised or IRBA).

The following table shows a summary, by approach, of the regulatory exposures of counterparty credit risk and associated risk-weighted assets for the entire scope of the BNP Paribas Group's bilateral activities, which represents the bulk of counterparty credit risk exposures.

➤ TABLE 65: BILATERAL COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT BY APPROACH (EU CCR1)

	31 December 2019						
In millions of euros	NPV(***) +Add-on	EEPE(**)	Multiplier	EAD post CRM	RWAs	*of which standardised approach*	*of which IRBA*
Mark-to-market	2,091			1,307	1,110	*1,067*	*43*
Internal model approach (IMM)		78,409	1.6	125,454	23,221	*2*	*23,220*
of which SFTs(*)		*27,256*	*1.6*	*43,610*	*2,760*	*1*	*2,759*
of which derivatives and long settlement transactions		*51,152*	*1.6*	*81,844*	*20,461*	*1*	*20,460*
TOTAL				**126,761**	**24,332**	***1,069***	***23,263***

(*) Securities Financing Transactions.
(**) Effective Expected Positive Exposure.
(***) Net Present Value.

	31 December 2018						
In millions of euros	NPV(***) +Add-on	EEPE(**)	Multiplier	EAD post CRM	RWAs	*of which standardised approach*	*of which IRBA*
Mark-to-market	1,899			1,313	998	*950*	*48*
Internal model approach (IMM)		64,768	1.6	103,629	19,702	*3*	*19,699*
of which SFTs(*)		*20,994*	*1.6*	*33,591*	*2,690*	*0*	*2,690*
of which derivatives and long settlement transactions		*43,774*	*1.6*	*70,038*	*17,012*	*2*	*17,009*
TOTAL				**104,942**	**20,700**	***953***	***19,747***

(*) Securities Financing Transactions.
(**) Effective Expected Positive Exposure.
(***) Net Present Value.

The following tables provide: the calculation of risk-weighted assets according to the Basel risk parameters using an IRB approach (see paragraph *Sovereign, financial institution, corporate and specialised financing portfolios* in *Credit risk: Internal Ratings Based Approach (IRBA)* in section 5.4), then using the standardised approach.

TABLE 66: IRBA BILATERAL COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT (EU CCR4)

		31 December 2019						
In millions of euros	PD scale	EAD	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	Average RW
Central governments or central banks	0.00 to < 0.15%	37,519	0.02%	100 to 1,000	1%	2	176	0%
	0.15 to < 0.25%	45	0.20%	0 to 100	20%	1	8	17%
	0.25 to < 0.50%	12	0.28%	0 to 100	50%	2	8	61%
	0.50 to < 0.75%	2	0.69%	0 to 100	50%	2	2	96%
	0.75 to < 2.50%	1	1.10%	0 to 100	50%	1	1	93%
	2.50 to < 10.0%	170	3.12%	0 to 100	50%	5	339	199%
	10.0 to < 100%	1	n.s.	0 to 100	n.s.	n.s.	6	n.s.
	100% (defaults)	-	-	-			-	-
SUB-TOTAL		**37,751**	**0.04%**		**2%**	**2**	**540**	**1%**
Institutions	0.00 to < 0.15%	17,265	0.05%	1,000 to 10,000	24%	1	2,078	12%
	0.15 to < 0.25%	1,058	0.18%	100 to 1,000	38%	1	347	33%
	0.25 to < 0.50%	1,169	0.35%	100 to 1,000	48%	1	707	60%
	0.50 to < 0.75%	131	0.68%	0 to 100	56%	1	86	65%
	0.75 to < 2.50%	267	1.38%	100 to 1,000	56%	1	234	88%
	2.50 to < 10.0%	173	4.51%	100 to 1,000	53%	1	242	140%
	10.0 to < 100%	0	11.95%	0 to 100	38%	1	0	179%
	100% (defaults)	26	100.00%	0 to 100			0	2%
SUB-TOTAL		**20,091**	**0.26%**		**27%**	**1**	**3,695**	**18%**
Corporates	0.00 to < 0.15%	53,373	0.06%	1,000 to 10,000	33%	1	8,319	16%
	0.15 to < 0.25%	4,630	0.17%	1,000 to 10,000	34%	2	1,499	32%
	0.25 to < 0.50%	3,446	0.37%	1,000 to 10,000	36%	2	1,753	51%
	0.50 to < 0.75%	1,588	0.69%	100 to 1,000	33%	3	1,071	67%
	0.75 to < 2.50%	2,991	1.33%	1,000 to 10,000	56%	2	3,876	130%
	2.50 to < 10.0%	1,399	4.35%	1,000 to 10,000	48%	2	2,145	153%
	10.0 to < 100%	122	16.86%	100 to 1,000	53%	2	359	295%
	100% (defaults)	111	100.00%	0 to 100			7	6%
SUB-TOTAL		**67,660**	**0.43%**		**35%**	**1**	**19,028**	**28%**
Retail		**0**	**n.s.**		**n.s.**	**n.s.**	**0**	**n.s.**
TOTAL		**125,501**	**0.29%**		**24%**	**2**	**23,263**	**19%**

		31 December 2018						
In millions of euros	PD scale	EAD	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	Average RW
Central governments or central banks	0.00 to < 0.15%	25,247	0.03%	100 to 1,000	1%	3	116	0%
	0.15 to < 0.25%	18	0.17%	0 to 100	26%	2	5	26%
	0.25 to < 0.50%	36	0.33%	0 to 100	49%	2	20	55%
	0.50 to < 0.75%	9	0.69%	0 to 100	50%	2	7	85%
	0.75 to < 2.50%	0	1.13%	0 to 100	39%	2	0	81%
	2.50 to < 10.0%	1	4.39%	0 to 100	68%	1	1	205%
	10.0 to < 100%	83	13.52%	0 to 100	60%	3	262	318%
	100% (defaults)	-	-	-			-	-
SUB-TOTAL		**25,393**	**0.07%**		**2%**	**3**	**412**	**2%**
Institutions	0.00 to < 0.15%	18,675	0.05%	1,000 to 10,000	22%	1	1,471	8%
	0.15 to < 0.25%	1,254	0.19%	100 to 1,000	45%	1	451	36%
	0.25 to < 0.50%	1,120	0.35%	100 to 1,000	50%	1	660	59%
	0.50 to < 0.75%	222	0.69%	100 to 1,000	50%	1	202	91%
	0.75 to < 2.50%	180	1.27%	100 to 1,000	51%	2	199	111%
	2.50 to < 10.0%	181	3.91%	100 to 1,000	57%	1	338	187%
	10.0 to < 100%	16	11.44%	0 to 100	19%	1	14	86%
	100% (defaults)	1	100.00%	0 to 100			-	0%
SUB-TOTAL		**21,649**	**0.13%**		**26%**	**1**	**3,336**	**15%**
Corporates	0.00 to < 0.15%	43,038	0.06%	1,000 to 10,000	32%	1	6,257	15%
	0.15 to < 0.25%	4,850	0.17%	1,000 to 10,000	37%	2	1,499	31%
	0.25 to < 0.50%	3,284	0.36%	1,000 to 10,000	41%	2	1,674	51%
	0.50 to < 0.75%	1,128	0.69%	100 to 1,000	31%	3	665	59%
	0.75 to < 2.50%	2,974	1.30%	1,000 to 10,000	52%	2	3,488	117%
	2.50 to < 10.0%	1,141	4.33%	1,000 to 10,000	55%	2	2,044	179%
	10.0 to < 100%	154	17.75%	100 to 1,000	46%	2	373	242%
	100% (defaults)	88	100.00%	0 to 100			0	0%
SUB-TOTAL		**56,656**	**0.45%**		**34%**	**1**	**15,999**	**28%**
Retail		**0**	**n.s.**		**n.s.**	**n.s.**	**0**	**n.s.**
TOTAL		**103,699**	**0.29%**		**24%**	**2**	**19,747**	**19%**

TABLE 67: STANDARDISED BILATERAL COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT (EU CCR3)

	31 December 2019									
	EAD									
Risk weight *In millions of euros*	0%	20%	35%	50%	75%	100%	150%	Total	*of which unrated*(*)	RWAs
Central governments or central banks	2	-	-	-	-	0	-	**2**	-	0
Institutions	-	204	-	36	-	5	-	**246**	*0*	64
Corporates	-	-	0	0	-	975	3	**978**	*925*	980
Retail	-	-	-	-	33	-	-	**33**	*33*	25
TOTAL	**2**	**204**	**0**	**36**	**33**	**980**	**3**	**1,259**	***959***	**1,069**

(*) *Exposure to counterparties without a credit rating from external rating agencies.*

	31 December 2018									
	EAD									
Risk weight *In millions of euros*	0%	20%	35%	50%	75%	100%	150%	Total	*of which unrated*(*)	RWAs
Central governments or central banks	-	-	-	-	-	2	-	**2**	-	2
Institutions	-	319	-	59	-	11	-	**390**	*0*	104
Corporates	-	-	0	7	0	838	1	**846**	*819*	843
Retail	-	-	-	-	5	-	-	**5**	*5*	4
TOTAL	**-**	**319**	**0**	**66**	**5**	**851**	**1**	**1,243**	***824***	**953**

(*) *Exposure to counterparties without a credit rating from external rating agencies.*

The table below presents the EAD distribution of OTC derivatives portfolio by rating. For each element, the table gives the part of netted transactions.

TABLE 68: BILATERAL COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT BY RATING

	31 December 2019		31 December 2018	
	Distribution of EAD	of which netted transactions	Distribution of EAD	of which netted transactions
AAA	9%	97%	12%	100%
AA	47%	96%	43%	96%
A	22%	91%	22%	93%
BBB	9%	93%	9%	90%
BB	5%	82%	6%	88%
B	5%	84%	5%	84%
Others	3%	79%	3%	88%

With respect to the OTC derivatives portfolio at 31 December 2019, the share of collateralised transactions represents more than 77% of the total by number of transactions.

COUNTERPARTY CREDIT RISK FOR EXPOSURES TO CENTRAL COUNTERPARTIES ASSOCIATED WITH CLEARING ACTIVITIES

The capital requirements related to central counterparties (CCP) exposures correspond to an extension of the bilateral counterparty credit risk perimeter to clearing activities; it covers the cleared part of the OTC derivatives, repo portfolio as well as the listed derivatives portfolio.

It is equal to the sum of the following three elements:

- a charge resulting from exposures generated by clearing activities (proprietary and client clearing);
- a requirement resulting from the non-segregated initial margins posted to the CCP;
- a requirement resulting from the default fund contribution of the central counterparties.

For central counterparties (CCP), Regulation (EU) No. 575/2013 distinguishes qualifying central counterparties (QCCP) from non-qualifying central counterparties. Qualifying central counterparties correspond to central counterparties authorised or recognised in accordance with Regulation (EU) No. 648/2012.

Regulation (EU) No. 575/2013 also provides for the use of an alternative method for calculating capital requirements for exposures to an qualifying central counterparty, based only on transaction exposures and prefunded default fund contributions.

At 31 December 2019, the Group had no exposure in non-qualifying central counterparties.

The table below presents the breakdown of the risk-weighted assets by method and category of exposure to central counterparties.

➤ TABLE 69: EXPOSURE TO CENTRAL COUNTERPARTIES (CCP) (EU CCR8)

		31 December 2019		31 December 2018	
In millions of euros		EAD	RWAs	EAD	RWAs
1	**Exposure to QCCP**		**2,895**		**2,621**
2	Exposure for trades at QCCPs (excluding initial margin and default fund contributions)	26,113	1,287	26,735	1,235
3	*of which OTC derivatives*	*3,141*	*63*	*3,748*	*75*
4	*of which listed derivatives*	*18,542*	*1,137*	*22,384*	*1,145*
5	*of which SFTs(*)*	*4,430*	*87*	*603*	*15*
8	Non-segregated initial margin(**)	9,368	240	9,873	261
9	Prefunded default fund contributions	3,762	1,320	3,099	1,069
10	Alternative calculation		49		56
10.a	*of which exposure for trades at QCCPs*	*201*	*11*	*139*	*10*
10.b	*of which segregated initial margin*	*664*	*13*	*311*	*6*
10.c	*of which non-segregated initial margin(**)*	*166*	*21*	*211*	*38*
10.d	*of which prefunded default fund contributions*	*42*	*4*	*32*	*1*
11	**Exposure to non-QCCPs**		**-**		**222**
12	Exposure to non-QCCPs (excluding initial margin and default fund contribution)	-	-	1	1
13	*of which OTC derivatives*	-	-	*1*	*1*
18	Non-segregated initial margin(**)	-	-	3	3
19	Prefunded default fund contributions	-	-	4	55
20	Unfunded default fund contributions	-	-	11	164
TOTAL		**40,316**	**2,895**	**40,419**	**2,843**

(*) *Securities Financing Transactions.*
(**) *Not bankruptcy remote in accordance with article 300.1 Regulation (EU) No. 575/2013.*

CVA RISK

The CVA risk measures the risk of losses caused by changes in the credit valuation adjustments resulting from credit spread changes associated with the counterparties to whom the Group is exposed (see paragraph *Credit Valuation Adjustments (CVA)*).

Using the standardised approach, the capital requirement for credit valuation adjustment risk (CVA) is calculated according to the supervisory formula.

Using the IRB approach, the CVA risk capital charge is the sum of two elements:

- CVA VaR charge, which represents the own funds requirement measured from a VaR computation on CVA sensitivities to credit spreads;
- CVA SVaR charge, which represents the own funds requirement measured from a stressed VaR computation on CVA sensitivities to credit spreads.

TABLE 70: CVA RISK EXPOSURE AT DEFAULT AND RISK-WEIGHTED ASSETS (EU CCR2)

	31 December 2019		31 December 2018	
In millions of euros	EAD	RWAs	EAD	RWAs
Advanced approach	**37,107**	**2,034**	**51,688**	**2,676**
CVA VaR charge		281		427
CVA SVaR charge		1,753		2,249
Standardised approach	**353**	**260**	**653**	**414**
TOTAL	**37,460**	**2,294**	**52,341**	**3,090**

COUNTERPARTY CREDIT RISK MANAGEMENT

CREDIT RISK MITIGATION TECHNIQUES

In the context of liquidity management and counterparty credit risk management, the BNP Paribas Group systematically monitors the collateral guarantees received and given, for both the portion hedging the contracts' market value (variation margin) and the risk of an adverse change in these market values in the event of a counterparty default (initial margin). The collateral given and received used in derivative contracts is mainly comprised of cash, and to a lesser extent, debt securities. The impact of the collateral received in clearing contracts is shown in the financial statements in note 5.q *Offsetting of financial assets and liabilites*.

As a general rule, when EAD is modelled in EEPE and weighted according to the IRB approach, the LGD (Loss Given Default) is not adjusted according to the collateral received since it is already taken into account in the "Effective Expected Positive Exposure" computation (see section *Bilateral counterparty risk*).

Collateral guarantees used in the standardised approach to reduce the EAD totalled EUR 442 million at 31 December 2019, compared with EUR 552 million at 31 December 2018.

The table below shows the breakdown of the collateral posted and received in respect of initial margins, margin calls as well as amounts in cash and in securities of repurchase agreements and securities lending and borrowing.

TABLE 71: COMPOSITION OF COLLATERAL POSTED AND RECEIVED (EU CCR5-B)

	31 December 2019			
	Collateral used in derivative transactions		Collateral used in SFTs(*)	
In millions of euros	Fair value of collateral received	Fair value of collateral posted	Fair value of collateral received	Fair value of collateral posted
Cash – euro	33,285	37,012	137,383	149,081
Cash – other currencies	18,810	19,900	236,981	213,017
Sovereign debt – euro	5,961	9,828	193,217	184,522
Sovereign debt – other currencies	4,026	5,837	203,200	221,090
Corporate and institutional debt	10,711	8,359	77,793	86,528
Equity	172	-	86,458	70,182
Other	370	-	235	110
TOTAL	**73,335**	**80,936**	**935,267**	**924,530**

(*) *Securities Financing Transactions.*

En millions d'euros	31 December 2018			
	Collateral used in derivative transactions		Collateral used in SFTs (*)	
	Fair value of collateral received	Fair value of collateral posted	Fair value of collateral received	Fair value of collateral posted
Cash – euro	28,121	31,484	109,329	132,595
Cash – other currencies	16,936	21,439	193,962	159,840
Sovereign debt - euro	2,908	4,436	81,068	110,872
Sovereign debt - other currencies	3,933	4,454	58,884	101,304
Corporate and institutional debt	6,148	5,033	156,448	141,375
Equity	230	-	106,304	142,327
Other	78	-	-	118
TOTAL	**58,353**	**66,846**	**705,995**	**788,432**

(*) *Securities Financing Transactions.*

CVA RISK MANAGEMENT

CVA sensitivities to credit spreads are partially offset by the recognition of hedges. These hedges correspond to credit derivatives on certain identified counterparties or indices composed of identifiable counterparties.

Instruments authorised as hedges in the calculation of the capital requirements for credit valuation adjustment risk form a sub-set of the credit derivatives used as hedges by the Global Markets business in the management of its CVA.

The following table summarises all the notional amounts and market values of the trading portfolio credit derivatives and highlights derivatives authorised as hedges.

➤ TABLE 72: CREDIT DERIVATIVES EXPOSURES (EU CCR6)

In millions of euros	31 December 2019			
	Credit derivative hedges		Other credit derivatives	
	Protection bought	Protection sold	Protection bought	Protection sold
Notionals	**5,214**	**1,158**	**500,019**	**434,469**
Single-name credit default swaps	3,365	673	233,371	209,300
Index credit default swaps	1,849	485	214,731	173,426
Total return swaps	-	-	3,091	1,048
Credit options	-	-	48,448	50,695
Other credit derivatives	-	-	378	-
Fair values	**(136)**	**30**	**(7,170)**	**6,694**
Positive fair value (asset)	6	31	923	7,699
Negative fair value (liability)	(142)	(1)	(8,093)	(1,005)

In millions of euros	31 December 2018			
	Credit derivative hedges		Other credit derivatives	
	Protection bought	Protection sold	Protection bought	Protection sold
Notionals	**4,614**	**1,104**	**446,447**	**421,177**
Single-name credit default swaps	2,728	503	203,252	203,229
Index credit default swaps	1,386	601	183,693	175,199
Total return swaps	-	-	23,654	-
Credit options	500	-	35,124	42,749
Other credit derivatives	-	-	725	-
Fair values	**(31)**	**10**	**(2,150)**	**1,956**
Positive fair value (asset)	20	11	2,431	4,411
Negative fair value (liability)	(51)	(2)	(4,581)	(2,455)

CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

➤ TABLE 73: COUNTERPARTY CREDIT RISK CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

In millions of euros	RWAs			Capital requirements		
	31 December 2019	31 December 2018	Variation	31 December 2019	31 December 2018	Variation
Bilateral counterparty credit risk	24,332	20,700	3,631	1,947	1,656	291
Exposure to CCP related to clearing activities	2,895	2,843	52	232	227	4
CVA charge	2,294	3,090	(796)	184	247	(64)
COUNTERPARTY CREDIT RISK	**29,520**	**26,634**	**2,887**	**2,362**	**2,131**	**231**

➤ TABLE 74: COUNTERPARTY CREDIT RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER (EU CCR7)

In millions of euros	RWAs – Counterparty credit risk		Capital requirements – Counterparty credit risk	
	Total	of which internal model method	Total	of which internal model method
31 December 2018	**26,634**	**19,702**	**2,131**	**1,576**
Asset size	3,666	3,566	293	285
Asset quality	(1,894)	(1,538)	(151)	(123)
Model update	1,524	1,511	122	121
Methodology and policy	-	-	-	-
Acquisitons and disposals	53	62	4	5
Currency	(1)	0	0	0
Other	(461)	(82)	(37)	(7)
31 DECEMBER 2019	**29,520**	**23,221**	**2,362**	**1,858**

The change in counterparty risk-weighted assets in 2019 is explained mainly by:

- a EUR 3.7 billion increase related to business activity;
- a EUR 1.5 billion increase following the updating of the models;
- a -EUR 1.9 billion decrease caused by the improved risk parameters.

5.7 Market risk

Market risk is the risk of incurring a loss of value due to adverse trends in market prices or parameters, whether directly observable or not.

Observable market parameters include, but are not limited to, exchange rates, prices of securities and commodities (whether listed or obtained by reference to a similar asset), prices of derivatives, and other parameters that can be directly inferred from them, such as interest rates, credit spreads, volatilities and implied correlations or other similar parameters.

Non-observable factors are those based on working assumptions such as parameters contained in models or based on statistical or economic analyses, non-ascertainable in the market.

In fixed income trading books, credit instruments are valued on the basis of bond yields and credit spreads, which represent market parameters in the same way as interest rates or foreign exchange rates. The credit risk arising on the issuer of the debt instrument is therefore a component of market risk known as issuer risk.

Liquidity is an important component of market risk. In times of limited or no liquidity, instruments or goods may not be tradable or may not be tradable at their estimated value. This may arise, for example, due to low transaction volumes, legal restrictions or a strong imbalance between demand and supply for certain assets.

The market risk related to banking activities encompasses the interest rate and foreign exchange risks stemming from banking intermediation activities.

Market risk is presented in this section in two parts:

- market risk linked to trading activities and corresponding to trading instruments and derivative contracts;
- market risk linked to banking activities encompassing the interest rate and foreign exchange risks stemming from banking intermediation activities.

CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS FOR MARKET RISK

➤ TABLE 75: MARKET RISK CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

	RWAs			Capital requirements		
In millions of euros	31 December 2019	31 December 2018	Variation	31 December 2019	31 December 2018	Variation
Internal model approach	17,521	17,726	(205)	1,402	1,418	(16)
Standardised approach	1,278	1,780	(502)	102	142	(40)
Trading book securitisation positions	498	442	56	40	35	4
TOTAL	**19,296**	**19,948**	**(652)**	**1,544**	**1,596**	**(52)**

Within the BNP Paribas Group, market risk is primarily handled using the internal model approach.

In 2019, market risk-weighted assets remained stable in connection primarily with an increase in volumes offset by the change in the models and improved risk parameters.

TABLE 76: MARKET RISK UNDER THE INTERNAL MODEL APPROACH (EU MR2-A)

In millions of euros		31 December 2019		31 December 2018	
		RWAs	Capital requirements	RWAs	Capital requirements
1	**VaR(*) (higher of values 1.a and 1.b)**	**4,644**	**371**	**5,488**	**439**
1.a	Previous day's VaR		100		124
1.b	Average of the daily VaR on each of the preceding sixty business days x multiplication factor		371		439
2	**SVaR(*) (higher of values 2.a and 2.b)**	**9,999**	**800**	**9,323**	**746**
2.a	Latest SVaR		233		212
2.b	Average of the SVaR during the preceding sixty business days x multiplication factor		800		746
3	**IRC(*)(**) (higher of values 3.a and 3.b)**	**2,384**	**191**	**2,436**	**195**
3.a	Most recent IRC value		191		177
3.b	Average of the IRC number over the preceding twelve weeks		165		195
4	**CRM(***) (higher of values 4.a, 4.b and 4.c)**	**494**	**40**	**479**	**38**
4.a	Most recent risk number for the correlation trading portfolio		35		35
4.b	Average of the risk number for the correlation trading portfolio over the preceding twelve weeks		35		38
4.c	8% of the own funds requirement in the standardised approach on the most recent risk number for the correlation trading portfolio		40		30
6	**TOTAL**	**17,521**	**1,402**	**17,726**	**1,418**

(*) VaR, SVaR and IRC values include all the components taken into account in the calculation of risk-weighted assets.
(**) Incremental Risk Charge.
(***) Comprehensive Risk Measure.

The market risk calculated using the standardised approach covers the market risk of some entities of the Group that are not covered by internal models. The standardised approach is used to calculate foreign exchange risk for the banking book (See section 5.7 *Market risk related to banking activities*).

TABLE 77: MARKET RISK UNDER THE STANDARDISED APPROACH (EU MR1)

In millions of euros		31 December 2019		31 December 2018	
		RWAs	Capital requirements	RWAs	Capital requirements
	Outright products				
1	Interest rate risk (general and specific)	308	25	260	21
2	Equity risk (general and specific)	0	0	-	-
3	Foreign exchange risk	968	77	1,513	121
	Options				
7	Scenario approach	2	0	7	1
8	**Securitisation (specific risk)**	**498**	**40**	**442**	**35**
9	**TOTAL**	**1,776**	**142**	**2,222**	**178**

TABLE 78: MARKET RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER (EU MR2-B)

	In millions of euros	VaR	SVaR	IRC(*)	CRM(**)	Standardised approach	Total RWAs	Total capital requirements
1	31 December 2018	5,488	9,323	2,436	479	2,222	19,948	1,596
2.a	Asset size	282	3,162	364	(29)	(617)	**3,162**	253
2.b	Asset quality	(344)	(857)	(361)	44	(13)	**(1,531)**	(122)
3	Model update	(752)	(1,643)	(3)	-	-	**(2,398)**	(192)
4	Methodology and policy	-	-	-	-	-	**-**	-
5	Acquisitons and disposals	(107)	(250)	(54)	-		**(411)**	(33)
6	Currency	-	-	-	-	-	**-**	-
7	Other	77	264	2	0	184	**527**	42
8	**31 DECEMBER 2019**	**4,644**	**9,999**	**2,384**	**494**	**1,776**	**19,296**	**1,544**

(*) Incremental Risk Charge.
(**) Comprehensive Risk Measure.

The change in market risk-weighted assets in 2019 is explained mainly by:

- a EUR 3.2 billion increase related to business activity;
- a -EUR 1.5 billion decrease caused by the improved risk parameters;
- a -EUR 2.4 billion decrease following the updating of the models;
- a -EUR 0.4 billion decrease following the termination of the proprietary trading activities of Opera Trading Capital.

MARKET RISK RELATED TO TRADING ACTIVITIES

INTRODUCTION

Market risk arises mainly from trading activities carried out within Corporate and Institutional Banking (CIB), mainly within Global Markets and encompasses different risk factors defined as follows:

- interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates;
- foreign exchange risk is the risk that the value of an instrument will fluctuate due to changes in foreign exchange rates;
- equity risk arises from changes in the market prices and volatilities of equity shares and/or equity indices;
- commodities risk arises from changes in the market prices and volatilities of commodities and/or commodity indices;
- credit spread risk arises from the change in the credit quality of an issuer and is reflected in changes in the cost of purchasing protection on that issuer;
- option products carry by nature volatility and correlation risks, for which risk parameters can be derived from option market prices observed in an active market.

Trading activities at BNP Paribas are directly related to economic relations with business line customers, or indirectly as part of market-making activities. BNP Paribas's proprietary trading activities, transferred to the Opera Trading Capital subsidiary in mid-2015, were shut during the first quarter of 2019.

MARKET RISK MANAGEMENT ORGANISATION

The market risk management system aims to track and control market risks as well as control financial instrument valuation whilst ensuring that the control functions remain totally independent from the business lines.

Within RISK, three departments are responsible for monitoring market risk:

- Global Markets RISK (GM RISK) covers Global Markets activities;
- Enterprise Risk Architecture (ERA – ALMT RISK) covers ALM-Treasury activities;
- International Retail Banking RISK (IRB RISK) covers International Retail Banking activities.

This mission consists of defining, measuring and analysing risk factors and sensitivities, as well as measuring and controlling Value at Risk (VaR), the global indicator of potential losses. RISK ensures that all business activity complies with the limits approved by the various committees and approves new activities and major transactions, reviews and approves position valuation models and conducts a monthly review of market parameters (MAP review) in association with the Valuation and Risk Control Department (V&RC).

Market Risk and financial instrument valuation monitoring is structured around several formal committees:

- the Capital Markets Risk Committee (CMRC) is the main committee governing the risks related to capital markets. It is responsible for addressing, in a coherent manner, the issues related to market and counterparty risk. The CMRC follows the evolution of the main exposures and stress risk and sets the high level trading limits. It meets approximately monthly and is chaired by either the Group Chief Executive Officer or by a Deputy Bank's Chief Operating Officer;
- the Product and Financial Control Committee (PFC) is the arbitration and pricing decision-making committee regarding financial instrument valuation matters. It meets quarterly and discusses the conclusions of the CIB Financial Control teams and their work to enhance control effectiveness and the reliability of the measurement and recognition of the results of market transactions. It is chaired by the Group Chief Financial Officer and brings together the Directors of Finance-Accounting, Corporate & Institutional Banking and RISK;
- at business line level, the Valuation Review Committee (VRC) meets monthly to examine and approve the results of Market parameters review (MAP review) and any changes in reserves. The Valuation Review Committee also acts as the referee in any disagreements between trading and control functions. The Committee is chaired by the Senior Trader and other members include representatives from trading, Risk, the CIB Valuation and Risk Control Group (V&RC) team, and Finance. Any disagreement is escalated to the PFC;
- the Valuation Methodology Committee (VMC) meets quarterly per business line to monitor model approvals and reviews, follow up relevant recommendations and present model governance improvements. This Committee is chaired by RISK GM and includes representatives from trading, research, and the valuation and risk control (V&RC) team of CIB and Finance. Any disagreement can be escalated to the PFC, which can make an arbitration decision.

VALUATION CONTROL

Financial instruments in the prudential trading book are valued and reported at market or model value through P&L, in compliance with applicable accounting standards. Such can also be the case of financial instruments classified in the banking book.

Portfolio valuation control is described in the Charter of Responsibility for Valuation, which sets out the division of responsibilities. These governance policies and practices also apply to all ALM Treasury activities.

In addition to the Charter, the relevant valuation controls are detailed in specific policies. The main processes that together form the valuation control governance mechanism are set out below.

Transaction accounting control

This control is under the responsibility of middle-office teams. However, the most complex transactions are controlled by RISK.

Market Parameter (MAP) review – Independent Price Verification

Price verification is managed jointly by Valuation and Risk Control (V&RC) and RISK. Daily controls are performed on the most liquid parameters and a comprehensive and formal review of all the market parameters is performed at month end. The types of parameters controlled by V&RC are listed precisely; these are essentially the parameters for which an automatic control against external sources can be implemented (security prices, vanilla parameters); this may include the use of consensus price services. RISK is in charge of controlling valuation methodologies as well as the most complex parameters that are very dependent on the choice of models.

The general principles of the Market Parameter review are described in the Charter of Responsibility for Valuation as well as specialised global policies such as the Global Marking and Independent Price Verification Policy and MAP Review Principles. The specific methodologies are described in documents known as the MAP Books organised by product lines and regularly updated. The responsibilities of RISK and V&RC are defined for each point in time and the conclusions of the Market Parameter reviews are documented in the MAP review finding documents.

The outcome of the Market parameter review is the estimation of valuation adjustments communicated to the middle-office, which enters it in the accounting records. The results are communicated to the Trading management during the Valuation Review Committees, where final decision or escalation is made. The opinion of the control functions prevails, however, significant and persistent disagreement can be escalated to the PFC.

Model Approval and Reviews

The governance of model controls is described in the Valuation Methodology Control Policy (VMCP).

Front office quantitative analysts design and propose the methodologies used to value the product and measure the risks that are used to take trading decisions. The research team and IT are responsible for the implementation of these models in the systems.

The independent control of the valuation models falls under the responsibility of RISK and includes:

- Models' validation, by which a formal decision to approve or reject a model is taken, including following any modification of the valuation methodology called a "Valuation Model Event". In all cases, the approval decisions are taken by a senior RISK analyst during a specific VMC. The review required by the validation process can be fast track or comprehensive; in the latter case, the reasons and conditions for approval are detailed in a model approval document;

- the review of models can be conducted at inception (linked to approval) or during the life of a model (re-calibration); it consists of an examination of the suitability of the model used to value certain products in the context of a given market environment;
- the control of the use and implementation of models, consists of continuous control of the correct parameterisation and configuration of the models as well as their suitability for the relevant products.

Reserve and other valuation adjustments

RISK defines and calculates "reserves". These are adjustments to the market or model value affecting both the accounting valuation and regulatory capital. They can be considered either as the exit cost of a position or as a premium for risks that cannot be diversified or hedged, as appropriate.

The reserves primarily cover:

- the bid-offer spreads and liquidity risk;
- the model or market parameters uncertainties;
- the reduction of non hedgeable risks (smoothing digital or barrier pay-offs).

A general valuation adjustment policy exists. Reserve methodologies are documented by RISK for each product line and these documentations are updated regularly. The analysis of reserve variations is reported at the monthly VRC.

Reserve methodologies are improved regularly and any change is a Valuation Model Event. Reserve improvements are generally motivated by the conclusion of a model review or by the calibration to market information during the Market parameter review process.

Additional Valuation Adjustments (AVA) are calculated in accordance with the Commission delegated Regulation (EU) No. 2016/101 of 26 November 2015, published in the OJEU on 28 January 2016.

This delegated regulation supplements the requirements of article 105 of the CRR with regard to regulatory technical standards for prudent valuation of financial instruments in the trading portfolio. It specifies that the scope of application of these requirements covers all instruments measured according to article 34 of the CRR, based on the proportion of the accounting valuation change that impacts Common Equity Tier 1 capital.

The regulatory technical standards set out the definitions and a framework for measurement and control for the elements of valuation uncertainty that must be considered when determining a prudent valuation under article 105. The standard also sets a target level of valuation certainty: the Bank must be 90% confident that it could liquidate the instrument at a better price than the prudent valuation.

To apply these requirements, the first step is to define Prudent Valuation Adjustments (PVA). These adjustments correspond to the different types of risks and costs that could lead to exit costs, relative to the mid-market value (or the expected value). The main categories are the liquidation cost, the risk related to uncertainties regarding market prices, concentration risk and valuation model risk. PVAs are calculated for each exposure on a granular level.

Based on these PVAs and for each exposure and risk type, BNP Paribas calculates the AVA (Additional Valuation Adjustments) that may be necessary, in addition to the reserves already taken into account in the valuation for the same exposure and risk type, to achieve the target valuation certainty level.

For some types of risk, the calculation of AVAs includes a diversification effect, which reflects the fact that the additional adjustments that may be necessary with respect to all positions are less than the sum of the additional adjustments that may be required for the individual positions or risks.

The AVA amounts are deducted from Common Equity Tier 1 capital.

Day One profit or loss

Some transactions are valued with non-observable parameters. Accounting norms require the recognition of any Day One P&L where these parameters are used. The deferred net margin on reserves is recognised through profit or loss in proportion to the anticipated duration of the transaction or the period for which the inputs will be non-observable.

RISK works with Finance, middle-offices, and business lines on the process of identifying and handling these profit and loss items, in order to determine whether a type of parameter or transaction is observable or not in accordance with the observability rules, which are moreover duly documented and approved in the Valuation Methodology Committee.

The P&L impact of the P&L deferral is calculated by the middle-office or the Finance teams, according to the scope.

The accounting treatment of the deferred margin is explained in Note 1e.10 to the financial statement..

MARKET RISK EXPOSURE

Market risk is first analysed by systematically measuring portfolio sensitivity to various market parameters. The results of these sensitivity analyses are compiled at various aggregate position levels and compared with market limits.

Risk monitoring set up and limit setting

The Group uses an integrated system to follow the trading positions on a daily basis and manage VaR calculations. This system not only tracks the VaR, but also detailed positions and sensitivities to market parameters based on various criteria (such as by currency, product, counterparty). This system is also configured to include trading limits, reserves and stress tests.

Responsibility for limit setting and monitoring is delegated at three levels, which are, in order of decreasing importance, CMRC, followed by the Head of the business line and finally the manager of a trading portfolio. Limits may be changed either temporarily or permanently, in accordance with the level of delegation and the prevailing procedures. Appropriate escalation mechanisms are in place to ensure that the independent view from the RISK Function on the level of limits is heard.

Core risk analysis and reporting to Executive Management

RISK reports, through various risk analyses and dashboards, to Executive Management and business lines' Senior Management on its risk analysis work (limit, VaR monitoring, core risk analysis, etc.). The MCLAR (Market, Counterparty and Liquidity Analysis and Reporting) team within RISK is responsible for compiling/circulating main global risk reports.

The following risk reports are generated on a regular basis:

- weekly "Main Position" reports for each business line (equity derivatives, commodities, credit G10 rates and FX & Local Markets), summarising all positions and highlighting items needing particular attention; these reports are mainly intended for business line managers;
- monthly local "bottom up" stress testing reports for Executive Management identifying key risk concentrations around the globe;
- supporting documentation for the CMRC comprising markets and risk event summaries, global counterparty exposure summary, VaR/Stressed VaR evolution, market and counterparty risk stress testing and capital evolution summaries, market and counterparty risk backtesting;
- geographical and global risk dashboards;
- reports on valuation adjustments in the trading book, in particular regarding market and CVA sensitivities.

VaR (Value at Risk)

The VaR is a statistical measure indicating the worst loss expected for a given portfolio over a given time horizon and within a given confidence interval under normal market movements. It is not a maximum loss and it can potentially be exceeded in some cases, for example in the event of abnormal market conditions.

The BNP Paribas VaR methodology aims to accurately compute a one-day Value at Risk at the 99% confidence level. The BNP Paribas VaR calculation uses an internal model which has been approved by the banking supervisor.

The VaR calculation is based on a Monte-Carlo approach, which not only performs normal or log-normal simulations but also accounts for the non-normality often observed in financial markets as well as correlation between risk factors. An equally weighted one-year rolling window of historical market data (updated every month) is used to calibrate the Monte-Carlo simulation.

The principle groups of simulated factors includes: interest rates, credit spreads, exchange rates, equity prices, commodities prices, and associated volatilities. Changes in risk factors are proportional (share prices, volatility, CDS spreads) or absolute (rates excluding OIS, spreads, repo rates, correlations).

The valuation method used varies depending not upon the product but upon the type of risk we are capturing. To generalise, the methods used are either sensitivity based or full revaluation based on grid interpolation to incorporate both linear and, especially for derivatives, non-linear effects. In both cases, BNP Paribas calculates the general and specific risk as a whole, taking into account the diversification effect by correlating market parameters.

The algorithms, methodologies and sets of indicators are reviewed and improved regularly to take into account the capital market evolution.

The scope of the BNP Paribas internal model covers the majority of capital market activities (Global Markets, BNP Paribas Securities Services, ALM Treasury). As an indication, market risk based on the standardised approach (excluding securitisation positions in the trading book) represented less than 7% of the total market risk capital requirement at 31 December 2019, including foreign exchange risk.

VaR is a statistical measure that does not take into account losses outside a given confidence interval, and does not apply to losses related to intraday market movements. Other risk measures, such as Stressed VaR (SVaR), IRC and CRM, complement the BNP Paribas Group's market risk monitoring and management system.

Evolution of the VaR (1-day, 99%)

The VaR set out below are calculated from an internal model, which uses parameters that comply with regulations in place. They correspond to measurements taken into account within the framework of monitoring market limits. They are based on a one-day time horizon and a 99% confidence interval.

In 2019, total average VaR for BNP Paribas was EUR 24 million (with a minimum of EUR 17 million and a maximum of EUR 33 million), after taking into account the -EUR 27 million netting effect between the different types of risks. These amounts break down as follows:

TABLE 79: VALUE AT RISK (1-DAY, 99%) [Audited]

In millions of euros	Year to 31 December 2019				Year to 31 December 2018	
	Minimum(**)	Average	Maximum(**)	Last measure	Average	Last measure
Interest rate risk	12	19	29	24	17	20
Credit risk	8	11	17	12	11	10
Foreign exchange risk	3	7	16	6	7	9
Equity price risk	7	10	18	9	15	17
Commodity price risk	2	4	7	3	4	6
Netting effect(*)		*(27)*		*(30)*	*(30)*	*(32)*
TOTAL VALUE AT RISK	**17**	**24**	**33**	**24**	**25**	**30**

(*) Note that the minimum and maximum figures shown above for the various risk types are computed on a standalone basis (i.e. independently from each other as well as the total VaR). While the minimum or maximum for each risk type may not necessarily be observed on the same date, minimum/maximum netting effects are not considered relevant.

(**) For minima and maxima, total VaR cannot be read as the sum of VaR by risk type.

VaR (1 day, 99%) fell in 2019 given the substantial reduction in the Group's sensitivity to market volatility, lower stock market volatility and the termination of the proprietary trading activities of Opera Trading Capital. It was low throughout 2019 and in May it hit its lowest level in ten years.

Backtesting the VaR

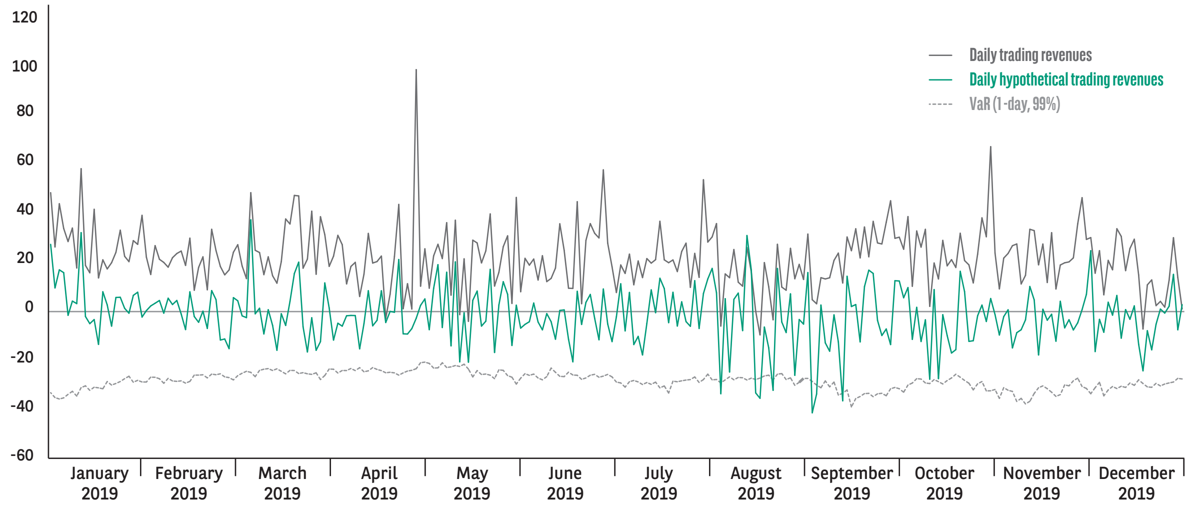
RISK continuously tests the accuracy of its internal model through a variety of techniques, including in particular a regular comparison over a long-term horizon between actual daily losses on capital market transactions and one-day VaR.

This backtesting consists of making a comparison between the daily global trading book VaR and the actual result except the, fees and commissions. In accordance with the regulation, BNP Paribas supplements this "actual backtesting" method with a comparison between the daily VaR and the hypothetical result generated by the trading book, which is also known as "hypothetical backtesting". The hypothetical result includes all components of the actual result, calculated on the previous day's positions, only incorporating changes in market parameters. A backtesting event is declared when a real or hypothetical loss exceeds the daily VaR amount. The confidence interval selected for calculating daily VaR is 99%, which in theory means the observation of two to three events per year.

The number of events is calculated at least quarterly and is equal to the highest of the number of excesses for the hypothetical and actual variations in the portfolio value.

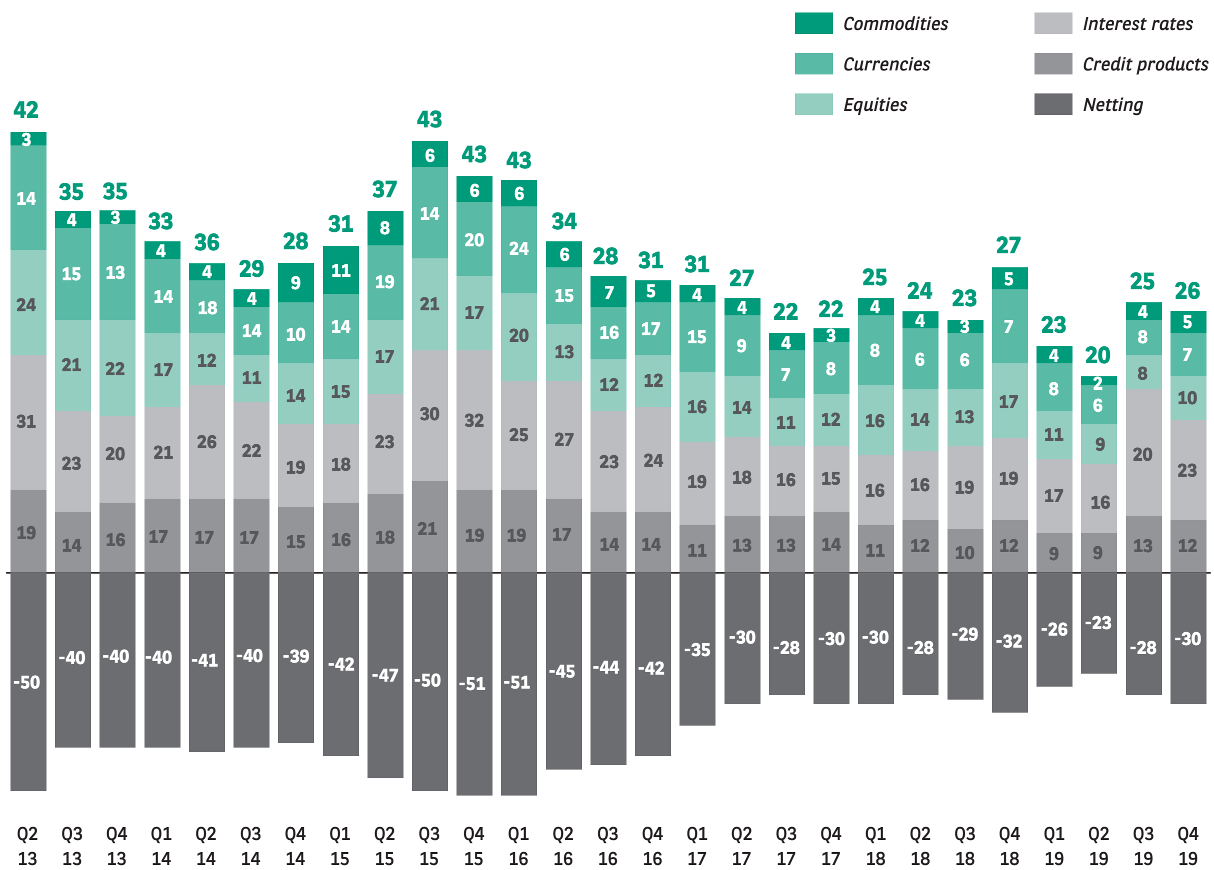
➤ **FIGURE 10: COMPARISON BETWEEN VAR (1-DAY, 99%) AND DAILY TRADING REVENUE (EU MR4)**

In millions of euros



Quarterly change in VaR

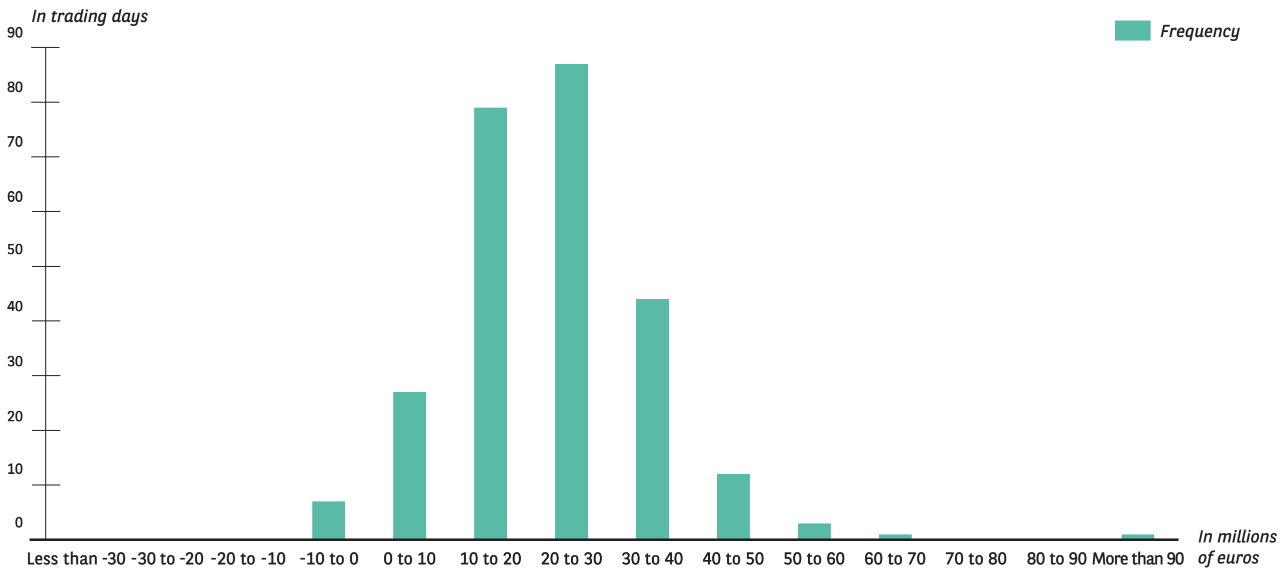
➤ **FIGURE 11: QUARTERLY CHANGE IN VAR (1-DAY, 99%)**



Distribution of daily income

The following histogram presents the distribution of the actual daily trading revenue of BNP Paribas, including intra-day revenues, fees and commissions. It indicates the numbers of trading days during which the revenue reached each of the levels marked on the x axis, in millions of euros.

FIGURE 12: DISTRIBUTION OF DAILY TRADING REVENUE



Trading activities generated an actual positive result for 97% of the trading days in 2019 (versus 91% in 2018).

Evolution of the VaR (10-day, 99%)

The VaR set out below are calculated from an internal model, which uses parameters that comply with the method recommended by the Basel Committee for determining estimated Value at Risk. They correspond to measurements taken into account within the framework of monitoring market limits. These are based on a ten-day time horizon and a 99% confidence interval, extrapolated from 1-day VaR amounts with the same confidence interval, by multiplying by a factor equal to the square root of ten.

In 2019, total average VaR (10-day, 99%) for BNP Paribas is EUR 75 million (with a minimum of EUR 52 million and a maximum of EUR 106 million), after taking into account the -EUR 84 million netting effect between the different types of risks. These amounts break down as follows:

TABLE 80: VALUE AT RISK (10-DAY, 99%) [Audited]

In millions of euros	Year to 31 December 2019				Year to 31 December 2018	
	Minimum(**)	Average	Maximum(**)	Last measure	Average	Last measure
Interest rate risk	37	59	91	75	55	64
Credit risk	24	35	55	38	35	30
Foreign exchange risk	10	23	49	19	21	29
Equity price risk	21	30	56	29	48	54
Commodity price risk	5	12	23	10	12	18
Netting effect(*)		*(84)*		*(96)*	*(94)*	*(101)*
TOTAL VALUE AT RISK	**52**	**75**	**106**	**75**	**79**	**94**

(*) Note that the minimum and maximum figures shown above for the various risk types are computed on a standalone basis (i.e. independently from each other as well as the total VaR). While the minimum or maximum for each risk type may not necessarily be observed on the same date, minimum/maximum netting effects are not considered relevant.

(**) For minima and maxima, total VaR cannot be read as the sum of VaR by risk type.

Stressed VaR

Stressed VaR is calibrated over a specified full twelve-month period, including a crisis period. This period applies across the Group, which must have comprehensive market data to calculate the risk measurements and remain relevant when applied to the current trading book. An expert committee reviews the period on a quarterly basis in accordance with a quantitatively informed approach among the three scenarios that generate the maximum stressed risk measures.

The current reference period for calibrating stressed VaR is from 3 January 2008 to 31 December 2008.

BNP Paribas uses the same calculation method as for calculating VaR, with market parameters determined based on this reference period.

The SVaRs presented below are based on a one-day time horizon and a 99% confidence interval and correspond to measurements taken into account within the framework of monitoring market limits.

In 2019, SVaR (1-day, 99%) held stable at around EUR 63 million throughout 2019.

➤ TABLE 81: STRESSED VALUE AT RISK (1-DAY, 99%)

	Year to 31 December 2019				Year to 31 December 2018	
In millions of euros	Minimum	Average	Maximum	Last measure	Average	Last measure
Stressed Value at Risk	48	63	85	63	48	63

Incremental Risk Charge (IRC)

The IRC approach measures losses due to default and ratings migration at the 99.9% confidence interval (*i.e.* the maximum loss incurred after eliminating the 0.1% worst events) over a capital and, liquidity or rebalancing frequency horizon of one year, assuming a constant level of risk on this horizon. The IRC scope mainly includes plain vanilla credit products (bonds and CDS, excluding securitised products) from the trading book.

This approach is used to capture the incremental default and migration risks on all non-securitised products.

The model is currently used in the risk management processes. This model was approved by the supervisor.

The calculation of IRC is based on the assumption of a constant level of risk over the one-year capital horizon, implying that the trading positions or sets of positions can be rebalanced during the one-year capital horizon in a manner that maintains the initial risk level, measured by the VaR or by the profile exposure by credit rating and concentration. This rebalancing frequency is called the liquidity horizon.

The model is built around a rating-based simulation for each obligor, which captures both the risk of the default as well as the risk of rating migration. The dependency between debtors is based on a multi-factor asset return model. The valuation of the portfolios is performed in each simulated scenario. The model uses a constant one-year liquidity horizon.

Throughout 2019, IRC continued the decline started in 2018 due to an increase in hedging instruments and a reduction of positions.

Comprehensive Risk Measure (CRM) for credit correlation portfolio

CRM is an additional capital charge to the IRC which applies to the credit correlation portfolio (excluding securitisation products) from the trading book. It measures potential losses from a variety of specific price change risks (spread, correlation, recovery, credit migration, etc.) at the 99.9% confidence interval (*i.e.* the maximum loss incurred after eliminating the 0.1% worst events) over a capital and liquidity horizon or rebalancing frequency of one year, assuming a constant level of risk over this horizon.

The corporate correlation activity is an activity that consists of trading and risk managing mainly bespoke corporate CDOs and their hedges using single name CDS, CDS indices and index tranches. This activity falls under the structured credit activity trading within the Credit business line of Global Markets.

The valuation framework uses both market observable prices (particularly used for CDS, index and index tranches) and data established based on models for the implicit correlations and recovery rates, using the models of dependency between debtors used for the IRC.

Summary of measures taken into account within the framework of monitoring market limits

➤ TABLE 82: INTERNAL MODEL APPROACH VALUES FOR TRADING PORTFOLIOS (EU MR3)

	In millions of euros	Year to 31 December 2019	Year to 31 December 2018
	VaR (10-day, 99%)		
1	Maximum	106	118
2	Average	75	79
3	Minimum	52	56
4	Last measure	75	94
	SVaR (10-day, 99%)		
5	Maximum	268	247
6	Average	198	151
7	Minimum	150	94
8	Last measure	201	201
	IRC(*) (99.9%)		
9	Maximum	397	367
10	Average	205	190
11	Minimum	100	92
12	Last measure	155	135
	CRM(**) (99.9%)		
13	Maximum	56	63
14	Average	37	44
15	Minimum	18	27
16	Last measure	35	35

(*) *Incremental Risk Charge.*
(**) *Comprehensive Risk Measure.*

Securitisation positions in trading book outside correlation portfolio

For securitisation positions treated as financial assets at fair value for accounting purposes, changes in market value, except accrued interest on fixed income securities, are recognised in the profit and loss account under "Net gain/loss on financial instruments at fair value through profit or loss".

For ABS positions outside the correlation book, the standardised capital charge applies (as per the standard method for banking books). The capital requirements are therefore calculated by applying a weighting to the risk-weighted assets (RWA), which is determined on the basis of the asset's external rating. The capital calculation are based on the second worst rating of the three rating agencies.

Trading book securitisation positions deducted from CET1 capital are excluded from the calculation of risk-weighted assets with respect to market risk. They are therefore not included in the following tables. At 31 December 2019, securitisation positions in the trading book deducted from CET1 capital amounted to EUR 7 million.

TABLE 83: BREAKDOWN OF TRADING BOOK SECURITISATION POSITIONS OUTSIDE CORRELATION BOOK BY ASSET TYPE

In millions of euros	Securitisation positions			
	31 December 2019		31 December 2018	
Asset category	Short positions	Long positions	Short positions	Long positions
Residential mortgages	-	130	-	84
Consumer loans	-	26	-	116
Credit card receivables	-	28	-	92
Loans to corporates	-	51	-	12
Finance leases	-	222	-	267
Other assets	-	32	-	5
TOTAL BALANCE SHEET	**-**	**488**	**-**	**574**
Residential mortgages	-	0	-	0
Loans to corporates	-	439	-	379
TOTAL OFF-BALANCE SHEET	**-**	**439**	**-**	**379**
TOTAL	**-**	**928**	**-**	**953**

TABLE 84: QUALITY OF TRADING BOOK SECURITISATION POSITIONS OUTSIDE CORRELATION BOOK

In millions of euros	Securitisation positions			
	31 December 2019		31 December 2018	
Tranche quality	Short positions	Long positions	Short positions	Long positions
Senior tranche	-	645	-	641
Mezzanine tranche	-	283	-	313
First-loss tranche	-	-	-	-
TOTAL	**-**	**928**	**-**	**953**

TABLE 85: BREAKDOWN OF TRADING BOOK SECURITISATION POSITIONS AND CAPITAL REQUIREMENTS CORRELATION BOOK BY RISK WEIGHT

In millions of euros	31 December 2019								
	Securitisation positions						Capital requirements		
	Short positions			Long positions			Short positions	Long positions	Total
Risk weight	Securitisation	Re-securitisation	Total	Securitisation	Re-securitisation	Total			
7% - 10%				249		249		2	2
12% - 18%				137		137		2	2
20% - 35%				426		426		10	10
40% - 75%				0		0		0	0
100%				78		78		9	9
250%				20		20		7	7
425%				0		0		0	0
650%				18		18		11	11
TOTAL	**-**	**-**	**-**	**928**	**-**	**928**	**-**	**40**	**40**

In millions of euros	31 December 2018								
	Securitisation positions						Capital requirements		
	Short positions			Long positions			Short positions	Long positions	Total
Risk weight	Securitisation	Re-securitisation	Total	Securitisation	Re-securitisation	Total			
7% - 10%				596		596		4	4
12% - 18%				168		168		2	2
20% - 35%				91		91		2	2
40% - 75%				31		31		2	2
100%				22		22		2	2
250%				1		1			
425%				3		3		1	1
650%				42		42		23	23
TOTAL	**-**	**-**	**-**	**953**	**-**	**953**	**-**	**35**	**35**

MARKET RISK STRESS TESTING FRAMEWORK

A range of stress tests are performed to simulate the impact of extreme market conditions on the value on the global trading books. Stress tests cover all market activities applying a range of stressed market conditions.

Scenarios

The fundamental approach of the current trading book stress testing framework combines "bottom up" and "top down" stress testing:

- Macro Level Scenarios (top down) comprise the evaluation of a set of global level stress test. These scenarios assess the impact of severe market moves on BNP Paribas trading positions related to large global or major regional market shock events. They can be based on historical events or forward-looking hypothetical scenarios. Scenarios include events such as an emerging markets crisis, credit crunch and a stock market crash, and some are based on past crises.

  The official macro stress tests scenarios currently comprise a range of eight different stress tests. The results of these scenarios are reviewed at each Capital Markets Risk Committee (CMRC). The scenarios are:

  - Scenario 1: unexpected rate hike, driving short-term rates higher with a flattening of the interest rate curve,
  - Scenario 2: stock market crash, with a flight to quality assets leading to a drop and a steepening of the interest rate curve,
  - Scenario 3: generic emerging market crisis designed to test global risk of these markets,
  - Scenario 4: credit crunch, leading to a general risk aversion,
  - Scenario 5: euro crisis, low GDP expectations, potential threat of a country leaving the euro and a significant weakening of the currency,
  - Scenario 6: energy crisis driven by severe geopolitical turmoil with serious consequences on energy markets,
  - Scenario 7: U.S. crisis, mostly based on a structural U.S. crisis spreading round the globe,
  - Scenario 8: risk-on scenario: rally in equity and emerging markets, low realised volatility and drop in implied volatility in all markets (effectively a return to risky assets);
- Micro Level Scenarios (bottom up): instead of looking at the effect on the global portfolio, these types of scenarios aim to highlight risk exposures on specific trading desks, regions or risk concentrations. This bottom up approach enables the use of more complex stress scenarios and hence allows the detection of areas of potential losses which may not be easily achieved under the global macro scenarios (such as complex market dislocations or idiosyncratic risk). This bottom up process also facilitates the classification of risk areas into those where there may be less liquidity or where the risk may be more structural in nature.

Process

It is the analysis of the above scenarios which enables the adverse scenario for the trading books to be constructed. The official stress scenario is presented at each Capital Markets Risk Committee along with the adverse global stress scenarios and any bottom up stress test yielding significant results.

The results of all stress tests are reviewed regularly by Executive Management and sent to the Board of directors.

The scenarios take market liquidity into account by simulating the drying up of certain assets or product liquidity as the stress event unfolds. To understand this process, it can be simplified by considering an approach where the time horizon for the stress shock can vary between different instruments/assets (hence more advanced scenarios can take certain idiosyncratic factors into account). Moreover, it may sometimes be required to quantify the impact of a stress event occurring with re hedging assumptions factored into part of the exposure under stress.

Stress testing is governed by the Capital Markets Stress Testing Steering Committee (STSC). The committee meets monthly and sets the direction of all internal risk departmental stress scenario developments, infrastructure, analysis and reporting. The STSC governs all internal stress testing matters relating to both market and counterparty risk and decides upon the detailed definition of the CMRC Stress Tests.

Stress testing is the core element of the tail risk analysis, which is also captured through the stressed Value at Risk, the Incremental Risk Charge and the Comprehensive Risk Measure. Furthermore, the risk of a rare event used in the form of the "average loss in addition to VaR" (Expected Shortfall) in allocating capital in respect of market risk between business lines is an additional element allowing tail risk in the management and monitoring of market risk to be taken into account.

MARKET RISK RELATED TO BANKING ACTIVITIES

Interest rate and foreign exchange risks related to banking intermediation activities and investments are managed by the cross-functional ALM Treasury Department. At Group level, the ALM-Treasury Department is directly overseen by the Chief Operating Officer. BNP Paribas SA's ALM Treasury Department exercises functional authority over the ALM Treasury teams of each entity or group of entities covering the entire Group perimeter. Strategic decisions are made by the Asset and Liability Committee (ALCo), which oversees ALM Treasury's activities. These committees have been set up at Group, entity or group of entities level.

The foreign exchange risk gives rise to a weighted assets calculation under Pillar 1. The interest rate risk falls under Pillar 2.

FOREIGN EXCHANGE RISK

Calculation of risk-weighted assets

Foreign exchange risk relates to all transactions part of the banking book.

Group entities calculate their net position in each currency, including the euro. The net position is equal to the sum of all asset items less all liability items plus off-balance sheet items (including the net forward currency position and the net delta-based equivalent of the currency option book), less structural, non-current assets (long-term equity interests, property, plant and equipment, and intangible assets). These positions are converted into euros at the exchange rate prevailing on the reporting date and aggregated to give the Group's overall net open position in each currency. The net position in a given currency is long when assets exceed liabilities and short when liabilities exceed assets. For each Group entity, the net currency position is balanced in the relevant currency (*i.e.* its reporting currency) such that the sum of long positions equals the sum of short positions.

The rules for calculating the capital requirement for foreign exchange risk are as follows:

- matched positions in currencies of Member States participating in the European Monetary System are subject to a capital requirement of 1.6% of the value of the matched positions;
- CFA and CFP francs are matched with the euro, and are not subject to a capital requirement;
- positions in closely correlated currencies are subject to a capital requirement of 4% of the matched amount;
- other positions, including the balance of unmatched positions in the currencies mentioned above, are subject to a capital requirement of 8% of their amount.

The amounts involved are set out in Table 77: *Market risk under the standardised approach (EU MR1)*.

Foreign exchange risk and hedging of net income generated in foreign currencies [Audited]

So-called "operating" foreign exchange risk exposure relates to net earnings generated by activities conducted in currencies other than the functional currency of the entity concerned. The Group's policy is to hedge the variability of its net income due to currency movements. To this end, earnings generated in a currency other than the functional currency of a given entity of the Group are hedged locally. Net income generated by foreign subsidiaries and branches and positions relating to portfolio impairment are managed centrally.

Foreign exchange risk and hedging of net investments in foreign operations [Audited]

The so-called "structural" foreign exchange position of an entity relates to investments in currencies other than the functional currency. This position mainly results from the capital endowment of the branches and equity investments in foreign currencies financed by buying the investment currency. This structural foreign exchange position, adjusted for any intangibles, constitutes asset exposure.

The Group's policy is to hedge portfolio exposure to liquid currencies, while at the same time maintaining the solvency ratio's limited sensitivity to exchange rate fluctuations. For this, borrowings in the same currency as the investment are used as an alternative to financing by purchasing the currency in question. Borrowings are recognised as hedges of investments.

INTEREST RATE RISK [Audited]

> Interest rate risk in the banking book, or global interest rate risk, is the risk of variability in results as a result of mismatches in interest rates, maturities and nature between assets and liabilities in the banking book. This risk arises in non-trading portfolios.

Organisation of the Group interest risk management

The Board of directors assigns responsibility to the Chief Executive Officer for management of interest rate risk in the banking book. The Board of directors is informed quarterly on the principles governing interest rate policy and the Group's position through the Internal Control, Risk and Compliance Committee (CCIRC).

The Chief Executive Officer delegates management responsibility to the Group ALM Committee (Asset and Liability Management Committee). The permanent members of the Group ALM Committee are the Chief Operating Officer (Chairman), the Deputy Chef Operating Officers heading up Core Businesses, the Group Chief Risk Officer, the Group Chief Financial Officer, the Group ALM Treasury Head, and the Head of General Inspection. The Group ALM Committee is responsible for defining the Group's interest rate risk profile, defining and tracking interest rate risk monitoring indicators and assigning limits.

ALM Treasury is responsible for the analysis of the management proposals and operational implementation of decisions related to managing the interest rate risk of the banking book as part of its delegated management.

The RISK Function participates in the Group ALM Committee and the local ALM Treasury Committees (ALCo) and oversees implementation by ALM Treasury of the relevant decisions made by these committees. It also provides second-line control by reviewing the models and risk indicators, monitoring the level of risk indicators and ensuring compliance with the limits assigned.

The banking book consists of the Group's total bank balance sheet, excluding trading book transactions. This includes intermediation transactions (deposits, loans, etc.), non-commercial balance sheet items (equity, fixed assets, etc.) and banking book risk management activities, including derivatives used for the management of interest rate risk on the banking book (notably when they are ineligible for hedge accounting under IFRS/GAAP).

Banking book interest rate risk in each BNP Paribas entity is systematically transferred to ALM Treasury, through internal analytic contracts or lending/borrowing transactions. For the Group as a whole, ALM Treasury is responsible for managing the interest rate risk transferred in this way.

Decisions concerning the management of interest rate risk are made and monitored during monthly or quarterly committee meetings by entity or group of entities, attended by representatives of local ALM Treasury, Group ALM Treasury, Finance and RISK Functions and senior management of the entities and/or businesses. Management of interest rate risk is done locally within each entity or group of entities.

Measurement of interest rate risk

Rate positions are measured taking into account the specific features of the risks managed. Hence, the Group has defined the concepts of standard rate risks and structural rate risks. The standard rate risk corresponds to the general case, namely when it is possible to define uniquely the most appropriate hedging strategy for a given transaction. The structural rate risk is the interest rate risk for equity and non-interest-bearing current accounts: these balance sheet items generate regular revenues but are sensitive to interest rate levels. However it is not possible to define a single hedging strategy to fully neutralise this sensitivity. In this case, the Group included all the possible so-called "neutral" management strategies in terms of interest rate risk.

Interest rate risks are analysed in terms of interest rate gaps that measure for each future period the potential rate characteristic mismatches between assets and liabilities (fixed rate and indexation type). In the interest rate gaps, the optional effects, in particular linked to behavioural options, are embedded and translated into their delta equivalent.

The maturity split is determined on the basis of the contractual terms of the transactions and historical observations of customer behaviour. For Retail Banking products, behavioural models are based on historical or forward data and econometric studies. These possible management strategies notably relate to early redemption and savings accounts. Moreover, the maturities of non-interest-bearing current accounts and of equity are calculated according to a more conventional approach defining a range of investments taking into account the objective of stabilising results and stability of deposits.

Interest rate risk is also measured through indicators of the sensitivity of revenues to interest rate changes on a going concern basis, incorporating dynamic changes in balance sheet items. This enables the partial or zero correlation between customer interest rates and market interest rates to be taken into account on the one hand, and the volume sensitivities to interest rates on the other hand, which create a risk to future revenues.

The choice of indicators and risk modelling are reviewed by RISK. The results and the adjustments following these reviews are presented and monitored to the committees on a regular basis.

The interest rate risk measurement indicators are consistently presented to the ALCos and serve as the basis for operating risk management decisions.

As stated in the introduction to the section *Market risk related to banking activities*, the interest rate risk comes under Pillar 2.

Risk limits

Interest rate risk indicators span the entire banking book.

The interest rate gaps are subject to interest rate risk limits across all time horizons. These limits are calibrated based on the nature of the risks (standard or structural) at Group and entity level. They are reviewed annually.

The Group's revenue sensitivity indicator is subject to limits and a warning threshold relative to the overall sensitivity level, which is broken down by division and the main entities. Moreover, the Group regularly monitors the impact of stress scenarios on its revenues.

Transactions that do not qualify for hedge accounting under IFRS are subject to specific limits.

Sensitivity of revenues to global interest rate risk

These sensitivities are calculated on the total banking book. They factor in the direct impacts of market rates and business trends over a period of up to three years. In addition, indirect effects on commercial activity linked to changes in outstandings and customer rates, notably the effects of inertia on margins of changes in interest rates (tightening – or widening – of margins on loans with an upward – or downward – in interest rate moves and conversely on deposits) are taken into account in accordance with the recommendations of the Basel Committee published in 2016.

The consolidated indicator is presented in the table hereafter. Over one-, two- and three-year timeframes, the sensitivity of revenues to a parallel, instantaneous and definitive increase in market rates of 50 basis points (+0.5%) across all currencies has an impact of respectively -EUR 270 million, +EUR 216 million and +EUR 614 million, or -0.6%, +0.5% and +1.4% of the Group's revenues.

In a very low or negative interest rate environment, the effects of a 0% floor on customer deposit rates lead to an increase in non-interest-bearing current accounts. These increases in non-interest-bearing current account balances, that are deemed temporary, are invested over prudent horizons. Sensitivities take into account hedging transactions limiting negative impacts related to holding interest rates at their current level or lower level and the change in income from liquidity surpluses placed with the ECB.

TABLE 86: SENSITIVITY OF REVENUES TO GLOBAL INTEREST RATE RISK BASED ON A 50 BASIS POINT INCREASE OR DECREASE IN THE INTEREST RATES [Audited]

Sensivity of 2019 revenues *In millions of euros*	For +50bp shock				For -50bp shock			
	EUR	USD	Other currencies	Total	EUR	USD	Other currencies	Total
Year 1	(259)	(25)	13	(270)	275	19	(32)	263
Year 2	166	13	37	216	(220)	(11)	(57)	(287)
Year 3	512	44	57	614	(474)	(37)	(76)	(587)

Sensivity of 2018 revenues *In millions of euros*	For +50bp shock				For -50bp shock			
	EUR	USD	Other currencies	Total	EUR	USD	Other currencies	Total
Year 1	125	41	19	185	(110)	(45)	(27)	(182)
Year 2	453	13	44	510	(433)	(17)	(48)	(498)
Year 3	604	38	56	698	(735)	(44)	(57)	(836)

Sensitivity of the value of the net assets of the banking intermediation activity

As the assets and liabilities of the Group's banking intermediation business are not intended to be sold, they are not recognised or managed on the basis of their theoretical economic value measured by discounting future cash flows. Similarly, the theoretical economic value of the net assets does not affect the Group's capital.

However, pursuant to the regulatory requirements and calculation methods laid down by the European Banking Authority (EBA), the ratios of sensitivity to variations of +/-200 basis points (+/-2%) in interest rates, of the theoretical economic value of the net assets of the intermediation business in relation to Tier 1 and Tier 2 capital are regularly calculated. These ratios are compared to the 20% threshold used by the supervisor to identify situations where interest rate risk in the banking book may be material. At end-2019, the ratio was -0.4% for a 200-basis-point decrease and -8.6% for a 200-basis-point increase. These values are both well below the materiality threshold of 20%. The regulatory floors as defined in the EBA's "Guidelines on the management of interest rate risk arising from non-trading book activities" are applied to interest rate shocks.

HEDGING OF INTEREST RATE AND FOREIGN EXCHANGE RISKS

Hedges initiated by the Group consist mainly of interest rate or currency hedges using derivative financial instruments (swaps, options and forwards).

Depending on the hedging objective, derivative financial instruments used for hedging purposes are qualified either as fair value hedges, cash flow hedges, or hedges of net investments in foreign operations. Each hedging relationship is formally documented at inception. The documentation describes the hedging strategy, identifies the hedged item and the hedging instrument, and the nature of the hedged risk; and describes the methodology used to test the expected (prospective) and actual (retrospective) effectiveness of the hedge.

Global interest rate risk

The Bank's strategy for managing global interest rate risk is mainly based on closely monitoring the sensitivity of the Bank's net income to changes in interest rates, factoring in all interest rate risks. The aim is to ensure the stability and regularity of the interest margin. This monitoring requires an extremely accurate assessment of the risks incurred so that the Bank can determine the hedging strategy, after taking into account the effects of netting the different types of risk. These hedging strategies are defined and implemented by entity and by currency.

The hedges can comprise swaps and options and are typically accounted for as fair value hedges or cash flow hedges. They may also take the form of government securities and are classified on an accounting basis as "Financial assets at amortised cost" or "Financial assets at fair value through equity".

Accordingly, amid uncertainties related to global trade, in August, low prospects of inflation and growth pushed long-term interest rates to historic lows below those reached in 2016, and led to changes in the European Central Bank's monetary policy, with asset purchases, targeted longer-term refinancing operations (TLTRO), a drop in the deposit facility rate, and a change in the remuneration of liquidity surpluses.

In the United States of America, where interest rates were higher, the same changes were observed.

As interest rates continue to fall, early redemptions and rate renegotiations have nevertheless remained low in domestic markets. The savings structure continued to be distorted in favour of non-interest bearing current accounts, making it necessary to regularly revisit the investment horizon of these accounts.

Structural foreign exchange risk [Audited]

Currency hedges are contracted by the ALM Treasury in relation to the Group's investments in foreign currencies and its future foreign currency revenues. Each hedging relationship is formally documented at inception. The documentation describes the hedging strategy, identifies the hedged item and the hedging instrument, and the nature of the hedged risk and describes the methodology used to test the expected (prospective) and actual (retrospective) effectiveness of the hedge.

A hedging relationship is applied and documented for investments in subsidiaries and branches financed by foreign currency loans so as to record movements in exchange rates symmetrically and avoid impacts on the profit and loss account. These instruments are designated as net investment hedges. The amount of these loans stood at EUR 18 billion at 31 December 2019, compared with EUR 22 billion at 31 December 2018. The changes in value related to exchange differences recognised directly in equity with respect to these hedges was -EUR 745 million in 2019, compared with –EUR 599 millions at 31 December 2018.

During the 2019 financial year, no net investment hedging relationships were disqualified. The amount recorded in the profit and loss account for 2019 with respect to the ineffective portion of hedges of net investments is immaterial.

Hedging of financial instruments recognised in the balance sheet (Fair Value Hedge)

Fair value hedges of interest rate risks relate either to identified fixed-rate assets or liabilities, or to portfolios of fixed-rate assets or liabilities. Derivatives are contracted to reduce the exposure of the fair value of these instruments to changes in interest rates.

Individual assets hedging consists mainly of securities classified as as "Financial assets at amortised cost" or "Financial assets at fair value through equity"; individual liabilities hedging consists mainly of fixed income securities issued by the Group.

Hedges of portfolios of financial assets and liabilities, constructed by currency, relate to:

- fixed-rate loans (property loans, equipment loans, consumer credit and export loans);
- fixed-rate deposits (mainly demand deposits and funds deposited under home savings contracts).

To identify the hedged amount, the residual balance of the hedged item is split into maturity bands, and a separate amount is designated for each band. The maturity split is determined on the basis of the contractual terms of the transactions and historical observations of customer behaviour (early redemption assumptions and estimated default rates).

Demand deposits, which do not bear interest at contractual rates, are qualified as fixed-rate medium-term financial liabilities. Consequently, the value of these liabilities is sensitive to changes in interest rates. Estimates of future cash outflows are based on historical analyses.

For each hedging relationship, expected hedge effectiveness is measured by ensuring that for each maturity band, the fair value of the hedged items is greater than the fair value of the designated hedging instruments.

Actual effectiveness is assessed on an *ex-post* basis by ensuring that the monthly change in the fair value of hedged items since the start of the month does not indicate any over-hedging.

Cash Flow Hedge

In terms of interest rate risk, the Group uses derivative instruments to hedge fluctuations in income and expenses arising on floating-rate assets and liabilities. Highly probable forecast transactions are also hedged. Hedged items are split into maturity bands by currency and benchmark interest rate. After factoring in early redemption assumptions and estimated default rates, the Group uses derivatives to hedge some or all of the risk exposure generated by these floating-rate instruments.

In terms of foreign exchange risk, the Group hedges against variability in components of consolidated net income. In particular, the Group may hedge future revenue flows (especially interest income and fees) derived from operations carried out by its main subsidiaries and/or branches in a currency other than their functional currencies. As in the case of interest rate hedges, the effectiveness of these hedging relationships is documented and assessed on the basis of forecast maturity bands.

The table below concerns the scope of BNP Paribas SA's medium- and long-term transactions and shows the amount of hedged future cash flows (split by forecast date of realisation), which constitute the majority of the Group's transactions.

➤ **TABLE 87: HEDGED CASH FLOWS** [Audited]

	31 December 2019				31 December 2018			
Period to realisation *In millions of euros*	Less than 1 year	1 to 5 years	More than 5 years	Total	Less than 1 year	1 to 5 years	More than 5 years	Total
Hedged cash flows	537	1,787	943	3,267	604	1,729	1,339	3,673

In 2019, no cash flow hedges were declassified on the grounds that achieving these future earnings was no longer be highly probable.

5.8 Liquidity risk

Liquidity risk is the risk that the Bank will not be able to honour its commitments or unwind or settle a position due to the market environment or idiosyncratic factors (*i.e.* specific to BNP Paribas), within a given timeframe and at a reasonable cost.

Liquidity risk reflects the risk of the Group being unable to fulfil current or future foreseen or unforeseen cash or collateral requirements, across all time horizons, from the short to the long term.

This risk may stem from the reduction in funding sources, draw down of funding commitments, a reduction in the liquidity of certain assets, or an increase in cash or collateral margin calls. It may be related to the bank itself (reputation risk) or to external factors (risks in some markets).

The Group's liquidity risk is managed under a global liquidity policy approved by the Group's ALM Committee. This policy is based on management principles designed to apply both in normal conditions and in a liquidity crisis. The Group's liquidity position is assessed on the basis of internal indicators and regulatory ratios.

LIQUIDITY RISK MANAGEMENT POLICY [Audited]

OBJECTIVES

The objectives of the Group's liquidity management policy are to secure a balanced financing structure for the development of BNP Paribas business activities, and to ensure it is sufficiently robust to cope with crisis situations.

The liquidity risk management framework relies on:

- management indicators:
  - by volume, to ensure that businesses or activities comply with their liquidity targets set in line with the Group's funding capacity,
  - by price, via internal liquidity pricing;
- the definition of monitoring indicators which enable assessment of the Group's liquidity position under normal conditions and in crisis situations, the efficiency of actions undertaken and compliance with regulatory ratios;
- the implementation of liquidity risk management strategies based on diversification of funding sources with maturities in line with needs, and the constitution of liquidity reserves.

The Group's liquidity policy defines the management principles that apply across all Group entities and businesses and across all time horizons.

GOVERNANCE

As for all risks, the Group Chief Executive Officer is granted authority by the Board of directors to manage the Group's liquidity risk. The Chief Executive Officer delegates this responsibility to the Group ALM Committee.

The Internal Control, Risk and Compliance Committee (CCIRC) reports quarterly to the Board of directors on liquidity policy principles and the Group's liquidity position.

The Group ALM Committee is responsible for:

- defining the Group's liquidity risk profile;
- monitoring compliance with regulatory liquidity ratios;
- defining and monitoring management indicators and calibrating the quantitative thresholds set for the Bank's businesses;
- defining and monitoring liquidity risk indicators and associating quantitative thresholds to them if necessary;
- defining and overseeing implementation of liquidity risk management strategies, including monitoring of business lines, under normal and stressed conditions.

In particular, the Group ALM Committee is informed about funding programmes and programmes to build up liquidity reserves, simulations in crisis conditions (stress tests), and about all events that may arise in crisis situations.

The Group ALM Committee is tasked with defining the management approach in periods of crisis (emergency plan). This framework is based on:

- supervision of the emergence of a crisis by monitoring the market position and complying with thresholds set for a series of indicators;
- governance of the activation of crisis management mode and the associated responsibilities;
- identification of possible actions for managing a crisis.

The Group ALM Committee meets every month under normal conditions and more often in stressed conditions. On a regular basis, specific meetings are dedicated to the business lines' monitoring indicators, notably to ensure that they comply with the set objectives. The Group ALM Committee may hold meetings to deal with specific issues whenever required.

The permanent members of the Group ALM Committee are the Chief Operating Officer (Chairman), the Deputy Chef Operating Officers heading up Core Businesses, the Chief Risk Officer, the Group Chief Financial Officer and the Group ALM Treasury Head. Other members represent the RISK Function, Finance Function and ALM Treasury.

Across the Group, ALM Treasury is responsible for the operational implementation of the Group ALM Committee's liquidity management decisions. The ALM Treasury Committees in entities or groups of entities are responsible for local implementation of the strategy decided by the Group ALM Committee to manage the bank's liquidity risk.

ALM Treasury is responsible for managing liquidity for the entire Group across all maturities. In particular, it is responsible for funding and short-term issuance (certificates of deposit, commercial paper, etc.), for senior and subordinated debt issuance (MTNs, bonds, medium/long-term deposits, covered bonds, etc.), preferred share issuance, and loan securitisation programmes for the Group. ALM Treasury is tasked with providing internal funding to the Group's divisions, operational entities and business lines, and investing their surplus cash. It is also responsible for building up and managing liquidity reserves, which comprise assets that can be easily sold in the event of a liquidity squeeze.

RISK participates in the Group ALM Committee and the local ALM Treasury Committees and oversees implementation by ALM Treasury of the relevant decisions made by these Committees. It provides second-line control by reviewing the models and risk indicators (including liquidity stress tests), monitoring risk indicators and ensuring compliance with the limits assigned.

Finance is responsible for producing the regulatory liquidity indicators, as well as the internal monitoring indicators. Finance oversees the consistency of the internal monitoring indicators with the objectives defined by the Group ALM Committee. Finance takes part in the Group ALM Committee and the local ALM Treasury Committees.

LIQUIDITY RISK MANAGEMENT AND SUPERVISION

Internal liquidity risk management and internal monitoring are based on a large range of indicators at various maturities. These indicators are measured on a regular basis by currency and maturity, both at Group level and entity level.

BUSINESS LINES' INTERNAL MONITORING INDICATORS [Audited]

The monitoring indicators relate to the funding needs of the Group's businesses under both normal and stressed conditions. These monitoring indicators are part of the Group's budget planning exercise with set objectives that are routinely monitored (monthly).

Funding needs of the Group's businesses

The funding needs associated with the activity of the Group's businesses are managed in particular by measuring the difference between commercial funding needs (customer loans and overdrafts, trading assets, etc.) and commercial funding resources (customer deposits, sale of the Group's debt securities to customers, trading liabilities, etc.). This indicator makes it possible to measure the business lines' liquidity consumption under a normal business scenario.

It is supplemented by indicators to measure the funding needs of the business lines in one month and one year depending on the assumptions defined by European regulations in force (Liquidity Coverage Ratio) or anticipated (Net Stable Funding Ratio).

In addition to this commercial funding need indicators, the Group closely monitors the liquidity reserves and the refinancing provided by ALM Treasury, as well as the Group's structural resources (*i.e.* net own funds).

The overall management of the business funding needs, the Group's structural resources, funding and liquidity reserves made by the ALM – Treasury allows the Group to achieve a structurally robust liquidity situation able to resist severe market stress.

Business lines' consumption of liquidity is thus integrated in the Group's budget process, wherein each business line estimates its future liquidity needs, in keeping with its profitability targets and capital consumption objectives. During the iterative budget process, liquidity consumption objectives are allotted to the business lines, taking into account the funding provided by ALM Treasury and structural resources, in line with the Group's overall target. This process is regularly renewed, monitored and adjusted as appropriate throughout the year by the Group ALM Committee.

Internal liquidity pricing

All of the Group's assets and liabilities are subject to internal liquidity pricing, the principles of which are decided by the Group ALM Committee and aim to take account of trends in the cost of market liquidity and the balance between assets and liabilities within the Group's development strategy.

Change in recent years

In 2019, business lines' consumption of liquidity increased slightly. The growth of credit products, particularly in domestic markets in France and Belgium as well in Personal Finance and Corporate Banking, was partially offset by the increase in deposits. The Group continues to have surplus liquidity and is seeking to limit the cost of these resources.

At end-2019, the net funding need of the businesses was low and largely covered by Group's net own funds, leading to excess liquidity before taking funding provided by the ALM Treasury into account.

In this context, the funding provided by ALM Treasury was used to finance the liquidity reserve, while also correcting the term structure differences between assets and liabilities and covering TLAC requirements.

WHOLESALE FUNDING AND LIQUIDITY RESERVE MONITORING INDICATORS [Audited]

Sources of wholesale funding

The Group adopted a broad definition of wholesale funding, covering all funds excluding those provided by:

- retail customers, SMEs and corporates;
- institutional clients for their operating needs (e.g. portion needed for custody management);
- monetary policy and funding secured by market assets.

This definition is broader than market funding. For example, it includes medium- to long-term debt placed in funds for individuals and, in the short-term portion, non-operating deposits in the Securities Services business.

The Group has a conservative policy for the management of its wholesale funding by ensuring that it does not depend on very short-term funding and diversifying these funding sources.

Thus, wholesale funding with an original maturity of less than one month, so-called very short-term wholesale funding, is systematically "sterilised" by being placed in immediately-available deposits in central banks so that they are not used to fund the Group's business.

The Group ensures that short-term wholesale funding (with original maturity of between one month and one year) is diversified in terms of counterparty, industry and residual maturity. Any excess concentration on one of these criteria is systematically "sterilised" and placed in central bank deposits.

Medium-to long-term wholesale market funding (with original maturity over one year) is diversified in terms of investor type, distribution network, funding programme (secured or unsecured), and by geographical area to ensure diversification. Furthermore, the Group aims to optimise the term structure of its funding operations.

At end-2019, sterilised very short-term wholesale funding totalled EUR 72.4 billion (leading to the sterilisation of an equivalent amount in the Group's liquidity reserve), diversified short-term wholesale funding totalled EUR 140.2 billion and diversified medium-to long-term wholesale funding totalled EUR 176.3 billion.

➤ TABLE 88: BREAKDOWN OF THE WHOLESALE FUNDING BY CURRENCY [Audited]

The breakdown of funding by currency corresponds to the Group's needs and to a diversification objective.

	31 December 2019			
In millions of euros	EUR	USD	Other	Total
Sterilised very short-term wholesale funding	41,132	17,600	13,637	72,369
Short-term wholesale funding	44,103	50,927	45,143	140,173
Medium- to long-term wholesale funding	100,200	54,029	22,107	176,336
TOTAL WHOLESALE	**185,435**	**122,556**	**80,887**	**388,878**

	31 December 2018			
In millions of euros	EUR	USD	Other	Total
Sterilised very short-term wholesale funding	42,277	17,323	15,555	75,155
Short-term wholesale funding	42,014	48,039	34,636	124,689
Medium- to long-term wholesale funding	90,178	50,113	18,406	158,697
TOTAL WHOLESALE	**174,469**	**115,475**	**68,597**	**358,541**

TABLE 89: BREAKDOWN OF THE GROUP'S MEDIUM- AND LONG-TERM (MLT) WHOLESALE FUNDING

The instruments are shown at their net carrying amount (including in particular accrued unpaid interest and the revaluation of the hedged portion).

In millions of euros	31 December 2019						
	Tier 1 hybrid debt	Tier 2 subordinated debt	Unsecured senior debt: Non-preferred	Unsecured senior debt: Preferred	Secured senior debt	Monetary policy funding	TOTAL
Total MLT funding	9,535	18,439	41,028	96,778	26,720	30,000	222,499
MLT debt placed with clients	-	-	-	(15,547)	(616)	-	(16,163)
Monetary policy	-	-	-	-	-	(30,000)	(30,000)
WHOLESALE MLT FUNDING	**9,535**	**18,439**	**41,028**	**81,231**	**26,103**	**-**	**176,336**

In millions of euros	31 December 2018						
	Tier 1 hybrid debt	Tier 2 subordinated debt	Unsecured senior debt: Non-preferred	Unsecured senior debt: Preferred	Secured senior debt	Monetary policy funding	TOTAL
Total MLT funding	8,982	16,084	23,421	94,838	29,732	35,000	208,057
MLT debt placed with clients	-	-	-	(14,360)	-	-	(14,360)
Monetary policy	-	-	-	-	-	(35,000)	(35,000)
WHOLESALE MLT FUNDING	**8,982**	**16,084**	**23,421**	**80,478**	**29,732**	**-**	**158,697**

TABLE 90: TRENDS IN THE GROUP'S WHOLESALE FUNDING

In millions of euros	31 December 2018	New origination	Redemp-tions	Buy-backs	Exercise of calls	Perimeter effect and other	31 December 2019
Total MLT funding	208,057	52,554	(23,478)	(4,193)	(16,106)	5,665	222,499
MLT debt placed with clients	(14,360)	(7,274)	2,444	1,484	1,127	416	(16,163)
Monetary policy	(35,000)	-	-	-	5,000	-	(30,000)
WHOLESALE MLT FUNDING	**158,697**	**45,280**	**(21,034)**	**(2,709)**	**(9,979)**	**6,082**	**176,336**

Total medium- to long-term wholesale funding outstandings stood at EUR 176.3 billion at 31 December 2019 against EUR 158.7 billion at 31 December 2018. This increase is mainly related to new issues conducted within the framework of the new TLAC environment (non preferred senior debt).

Wholesale funding raised by the Group in the markets with an initial maturity of over 1 year reached EUR 45.3 billion in 2019, up from EUR 42.8 billion in 2018.

Wholesale funding trends based on regulatory changes

In addition to the Group's liquidity management targets, use of wholesale funding also satisfies new regulatory requirements relating to Recovery and Resolution, with the application of the TLAC ratio minimum requirement since 27 June 2019 (see paragraph *Recovery and resolution* in *Capital adequacy and capital planning* section in section 5.2).

In order to comply with the regulatory TLAC ratio requirements of 20.17% at 31 December 2019, BNP Paribas issued EUR 39.6 billion (principal remaining outstanding) or EUR 41.0 billion (carrying amount, including in particular accrued unpaid interest and revaluation of the hedged portion) of non preferred senior TLAC-eligible debt between 2017 and 2019, with different maturity dates and in various currencies, in the form of public issuances and private placements.

To meet the TLAC requirement of 22% in 2022 (excluding countercyclical capital buffer) and to prepare for future MREL requirements, in 2020 the Group plans to issue EUR 13 billion of non-preferred senior debt, subject to market conditions. The Group had completed more than 25% of its issue programme as at 31 January 2020.

As a reminder, the main characteristics of these debt instruments are:

- issuance under EMTN and U.S. MTN programmes;
- non preferred senior notes (pursuant to article L.613-30-3-I-4 of the French Monetary and Financial Code);

- non-structured debt[(1)];
- initial maturity of more than one year;
- subject to conversion or depreciation before senior preferred debt but after subordinated debt;
- documentation mandatorily stating that this debt belongs to the new statutory category.

MLT secured wholesale funding

MLT secured wholesale funding is measured by separating out assets representing securities and loans. Funding obtained from central banks is not included in the table below.

TABLE 91: MLT SECURED WHOLESALE FUNDING

	31 December 2019		31 December 2018	
In millions of euros	Collateral used(*)	Funding raised(**)	Collateral used(*)	Funding raised(**)
Loans and receivables	29,874	25,531	37,046	28,977
Securities	762	573	933	754
TOTAL	**30,636**	**26,103**	**37,979**	**29,731**

(*) Amounts gross of haircuts.
(**) Amounts net of haircuts.

MLT secured wholesale funding (outside of monetary policy) represents 14.8% of total MLT wholesale funding in 2019 (18.7% in 2018). The Bank carefully manages its proportion of secured funding and the associated overcollateralisation in order to protect creditors holding unsecured debt.

Covered bonds and securitisation programmes are the main sources of the Group's secured financing. On average, covered bonds are over-collateralised by 119% and securitisation programmes by 113%.

Medium- to long-term liquidity position

The medium-to long-term liquidity positions are measured regularly at Group level by entity and by currency to evaluate the medium-to long-term resources and uses. To this end, each balance sheet item is given a maturity in an economic approach using models and conventions offered by the ALM Treasury and reviewed by the RISK Function, or a regulatory approach by applying standardised weightings of the Net Stable Funding Ratio (NSFR) as anticipated for its application in Europe. For example, despite their immediate availability, the current accounts of retail customers and those linked with corporates' cash management activities always remain highly stable, even through the most severe financial crises, thus constituting stable medium- to long-term funding sources in both an economic and a regulatory approach.

Stress tests and liquidity reserve

Liquidity stress tests are performed regularly on various maturities (one day to twelve months) based on market factors and/or factors specific to the Group and using different scenarios: idiosyncratic (*i.e.* specific to BNP Paribas), systemic crisis (affecting financial institutions), and combined crisis scenarios.

For each crisis scenario considered, borrowings and liabilities are expected to only partially renew, while loan amortisations are expected to be replaced by new loans to protect the commercial franchise, off-balance sheet financing commitments are expected to be used, and market assets are expected to lose their market liquidity. Commitment renewal and utilisation are differentiated in intensity and in time, based on client type (individuals, small and medium enterprises, corporates, financial institutions, etc.) and/or the type of underlying for secured borrowings and loans (repos/reverse repos). Stress scenarios also cover calls for additional collateral (e.g. increased margin calls for collateralised derivatives, impact of "rating trigger" clauses).

The liquidity reserve consists of Group assets held by ALM Treasury and the capital market businesses. The liquidity reserve comprises:

- deposits with central banks;
- available assets that can be immediately sold on the market or through repurchase agreements (bonds or shares);
- available securities and receivables that can be refinanced with central banks (e.g. through securitisation, transforming less liquid assets into liquid or available assets) (see section 5.5 *Proprietary Securitisation (originator)*).

(1) Decree No. 2018-710 of 3 August 2018 specifies the conditions in which a security, a receivable, an instrument or a right is considered as non-structured under 613-30-3 I-4° of the French Monetary and Financial Code.

The global liquidity reserve (counterbalancing capacity) is calculated net of the payment systems' intraday needs and in keeping with prudential rules, in particular U.S. rules, under which certain liquid assets are only recognised as available after a certain time period. Transferability restrictions are also taken into consideration in the calculation of the Group's liquidity reserve. These restrictions may stem from local regulations which limit transfers between entities of a group, non-convertible currencies or jurisdictions with foreign exchange control.

The table below shows its trends.

➤ TABLE 92: BREAKDOWN OF GLOBAL LIQUIDITY RESERVE (COUNTERBALANCING CAPACITY)

In millions of euros	Average 2019	31 December 2019	31 December 2018
Total eligible assets	443,704	421,918	412,325
Utilisations	(100,755)	(108,713)	(101,877)
Transferability	(2,983)	(4,228)	(2,331)
GLOBAL LIQUIDITY RESERVE	**339,966**	**308,977**	**308,117**
of which liquid assets meeting prudential regulation requirements (HQLA)	*312,596*	*276,500*	*288,200*
of which other liquid assets	*27,370*	*32,477*	*19,917*

The Group's liquidity reserve stood at EUR 309 billion at end-2019, of which EUR 72.4 billion sterilising very short-term wholesale funding.

The Group's liquidity reserve at 31 December 2019 was stable compared to end-2018. In yearly average terms, the reserve grew by more than EUR 20 billion compared with the previous year, with an increase in liquid securities, mainly bonds issued or guaranteed by governments and central banks in the European Economic Area.

REGULATORY LIQUIDITY RATIOS

Scope of application

The prudential liquidity scope defined by the BNP Paribas Group for monitoring and overseeing liquidity ratios on a consolidated basis is the one defined for its capital ratio adequacy, with the exception of jointly controlled entities which are consolidated under the equity method in the prudential liquidity scope (see *Scope of application* in section 5.2 *Capital management and capital adequacy*).

Liquidity coverage ratio - LCR

The 30-day Liquidity Coverage Ratio (LCR) came into force on 1 October 2015 setting the minimum coverage ratio for net cash outflows over a one-month time horizon, in a crisis situation, at 100% from 1 January 2018. The Group measures its liquidity requirements in accordance with the requirements of the Delegated Act adopted by the European Commission in January 2015. It has adapted its management process in keeping with this regulation. The management indicators for the businesses' funding needs and the internal pricing terms therefore reflect the standardised assumptions set by the LCR and allow the Group to monitor compliance with the requirement.

The Group's LCR for the period ending 31 December 2019 stood at 125%, versus 132% at 31 December 2018.

The Group's LCR is detailed below in accordance with EBA Guidelines on LCR disclosure of LCR published on 8 March 2017. Accordingly, the Group's LCR is calculated as the rolling average of the twelve latest month-end measures.

TABLE 93: SHORT-TERM LIQUIDITY RATIO (LCR)(*) - ITEMISED

	In millions of euros	Unweighted value				Weighted value			
		31 December 2019	30 September 2019	30 June 2019	31 March 2019	31 December 2019	30 September 2019	30 June 2019	31 March 2019
	Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
	HIGH QUALITY LIQUID ASSETS (HQLA)								
1	**TOTAL HIGH QUALITY LIQUID ASSETS**					**312,596**	**311,531**	**304,489**	**299,939**
	CASH OUTFLOWS								
2	Retail deposits (including small businesses)	347,460	342,133	337,129	333,974	25,965	25,563	25,216	25,015
3	*of which stable deposits*	*223,862*	*220,166*	*215,936*	*212,517*	*11,193*	*11,008*	*10,797*	*10,626*
4	*of which less stable deposits*	*123,269*	*121,634*	*120,869*	*121,145*	*14,443*	*14,222*	*14,096*	*14,078*
5	Unsecured non-retail funding	430,479	424,733	414,715	405,381	215,636	215,389	210,920	206,062
6	*of which operational deposits*	*123,949*	*122,005*	*121,389*	*121,593*	*30,188*	*29,655*	*29,507*	*29,614*
7	*of which non-operational deposits*	*291,614*	*287,064*	*278,342*	*269,595*	*170,532*	*170,070*	*166,429*	*162,255*
8	*of which unsecured debt*	*14,916*	*15,664*	*14,984*	*14,193*	*14,916*	*15,664*	*14,984*	*14,193*
9	Secured non-retail funding (of which repos)					56,760	53,108	51,703	51,233
10	Additional requirements	302,680	295,199	287,032	285,116	65,394	64,037	61,520	60,903
11	*of which outflows related to derivative exposures and other collateral requirements*	*26,904*	*26,880*	*25,715*	*25,536*	*26,824*	*26,764*	*25,552*	*25,327*
12	*of which outflows on secured debt*	*168*	*158*	*156*	*171*	*168*	*158*	*156*	*171*
13	*of which credit and liquidity facilities*	*275,608*	*268,161*	*261,161*	*259,409*	*38,403*	*37,115*	*35,812*	*35,406*
14	Other contractual funding obligations	45,895	48,161	48,519	50,770	45,895	48,161	48,519	50,770
15	Other contingent funding obligations	49,440	49,543	48,545	46,737	4,270	4,389	4,334	4,188
16	**TOTAL CASH OUTFLOWS**					**413,920**	**410,647**	**402,212**	**398,171**
	CASH INFLOWS								
17	Secured lending (of which reverse repos)	344,729	335,633	328,857	327,367	58,140	54,601	51,909	50,773
18	Inflows from fully performing exposures	85,071	83,785	83,447	83,335	61,497	59,723	58,709	57,997
19	Other cash inflows	46,385	46,062	41,985	40,743	39,696	39,317	35,705	34,955
20	**TOTAL CASH INFLOWS**	**476,185**	**465,481**	**454,289**	**451,446**	**159,334**	**153,641**	**146,322**	**143,725**
EU-20c	Inflows subject to 75% cap	401,183	392,633	378,944	373,763	159,334	153,641	146,322	143,725
21	**LIQUIDITY BUFFER**					**312,596**	**311,531**	**304,489**	**299,939**
22	**TOTAL NET CASH OUTFLOWS**					**254,587**	**257,005**	**255,890**	**254,446**
23	**LIQUIDITY COVERAGE RATIO *(%)***					**123%**	**121%**	**119%**	**118%**

(*) The data presented in this table are calculated as the rolling average over the twelve latest month-end values.

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The Group's LCR stood at 123% on average monthly during 2019, which is a liquidity surplus of EUR 58 billion compared with the fully loaded regulatory requirements.

After the application of the regulatory haircuts (weighted value), the Group's liquid assets amounted to EUR 313 billion on average monthly in 2019, and mainly consisted of central bank deposits (55% of the buffer) and government and sovereign bonds (34%). Part of the securities which are eligible by central banks and provide access to liquidity are not recognised as liquid within the meaning of the European prudential regulation and are not included in the regulatory reserve. This is the main difference between the liquidity reserve (see Table 92) and the regulatory reserve. The liquid assets recognised by the prudential regulation must be immediately available to the Group.

Cash outflows under the thirty-day liquidity stress scenario amounted to EUR 255 billion on average during 2019, a large part of which corresponds to thirty-day deposit outflow assumptions of EUR 242 billion. Reciprocally, cash inflows on loans under the thirty-day liquidity regulatory stress scenario amounted to EUR 61 billion.

Cash flows on financing transactions and collateralised loans representing repurchase agreements and securities exchanges recorded a net inflow of EUR 1 billion on average in 2019, given the regulatory haircuts applied to collateral. Flows linked to derivative instruments and regulatory stress tests recorded a net outflow of EUR 10 billion after netting of cash outflows (EUR 27 billion) and inflows (EUR 17 billion). Lastly, the drawdown assumptions on financing commitments amounted to EUR 38 billion.

On a moving average over the last twelve monthly measurements, the Group's LCR rose up to 123% in 2019 from 118% in 2018. Stocks of liquid assets are managed to cover variations in net cash outflows while maintaining surplus liquidity at all times. This stood at between EUR 45 and 58 billion over the fully loaded coverage ratio for net cash outflows. Levels of liquid assets increased faster than cash outflows. This phenomenon reflects essentially the variation in very short-term wholesale funding which is immediately placed in very liquid assets according to the sterilisation principle explained in the paragraph *Sources of Wholesale Funding*, to immunise the LCR from the volatility intrinsic to this type of funding.

Net Stable Funding Ratio – NSFR

Regulation (EU) No. 2019/876 introduced a second regulatory ratio relating to liquidity risk, the Net Stable Funding Ratio – NSFR, which will be the subject of a 100% minimum requirement from 28 June 2021. This ratio aims to ensure that all assets and medium- and long-term funding (with original maturity over one year) are well covered by funding sources which are also medium- and long-term.

SCHEDULE OF THE BANK'S PRUDENTIAL BALANCE SHEET

This schedule presents cash flows according to contractual payment dates within the prudential scope (see *Scope of application* in section 5.2 *Capital management and capital adequacy*) in line with the rules defined for the liquidity ratio.

The securities in the trading book listed at fair value through profit or loss are presented with "not determined" maturities, as the securities' contractual maturity is not representative of the Group's planned holding period. Likewise, derivative financial instruments listed at fair value through profit or loss, derivatives used for hedging purposes and remeasurement adjustments on interest-rate risk hedged portfolios are presented with "not determined" maturities.

In the following table and in the event of an early repayment option, the rules applied are the most conservative:

- if the option is at the hands of both parties, the repayment date is the next contractual date for the exercise of the option;
- if the option is at the hands of the counterparty, the date for the repayment of assets is the date of final maturity while that used for liabilities is the next contractual date for the exercise of the option;
- if the option is at the hands of the Group, the repayment date is the next contractual date for the exercise of the option, for both assets and liabilities;
- in the case of subordinated debt, the redemption date used is the final maturity date.

➤ TABLE 94: CONTRACTUAL MATURITIES OF THE PRUDENTIAL BALANCE SHEET [Audited]

	31 December 2019							
In millions of euros	Not determined	Overnight or demand	Up to 1 month (excl. Overnight)	1 to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	TOTAL
ASSETS								
Cash and amounts due from central banks	-	155,400	-	-	-	-	-	155,400
Financial instruments at fair value through profit and loss								
Securities	132,341	-	-	-	-	-	-	132,341
Loans and repurchase agreements	-	36,023	104,796	34,055	16,809	3,379	2,847	197,910
Derivative financial instruments	247,521	-	-	-	-	-	-	247,521
Derivatives used for hedging purposes	12,451	-	-	-	-	-	-	12,451
Financial assets at fair value through equity								
Debt securities	87	5	626	799	4,128	28,610	19,478	53,734
Equity securities	2,266	-	-	-	-	-	-	2,266
Financial assets at amortised cost								
Loans and advances to credit institutions	-	7,388	6,744	3,155	2,695	1,153	239	21,374
Loans and advances to customers	-	18,599	60,047	65,149	118,795	319,230	248,628	830,448
Debt securities	0	101	2,614	3,505	8,682	37,209	57,360	109,471
Remeasurement adjustment on interest rate risk hedged portfolios	4,351	-	-	-	-	-	-	4,351
Financial assets	**399,017**	**217,516**	**174,828**	**106,663**	**151,109**	**389,581**	**328,553**	**1,767,267**
Other non-financial assets	62,573	13,595	8,039	5,802	3,904	47,518	11,937	153,370
TOTAL ASSETS	**461,590**	**231,112**	**182,867**	**112,465**	**155,013**	**437,099**	**340,491**	**1,920,637**
LIABILITIES								
Deposit from central banks	-	2,985	-	-	-	-	-	2,985
Financial instruments at fair value through profit and loss								
Securities	65,490	-	-	-	-	-	-	65,490
Deposits and repurchase agreements	-	13,931	163,083	31,261	3,875	1,636	1,309	215,095
Issued debt securities	-	19	1,496	2,722	10,992	26,021	17,585	58,834
Derivative financial instruments	238,214	-	-	-	-	-	-	238,214
Derivatives used for hedging purposes	14,277	-	-	-	-	-	-	14,277
Financial liabilities at amortised cost								
Deposits from credit institutions	-	9,744	12,543	20,499	15,941	19,051	728	78,507
Deposits from customers	-	677,022	77,780	48,309	24,111	9,975	4,971	842,167
Debt securities	-	3	5,465	26,452	46,612	49,046	34,030	161,608
Subordinated debt	-	7	5	18	272	1,421	16,596	18,319
Remeasurement adjustment on interest rate risk hedged portfolios	3,989	-	-	-	-	-	-	3,989
Financial liabilities	**321,969**	**703,710**	**260,373**	**129,261**	**101,803**	**107,150**	**75,217**	**1,699,484**
Other non-financial liabilities	135,210	9,154	14,714	5,796	2,168	43,771	10,341	221,153
TOTAL LIABILITIES AND EQUITY	**457,179**	**712,864**	**275,087**	**135,057**	**103,971**	**150,920**	**85,558**	**1,920,637**

In millions of euros	31 December 2018							
	Not determined	Overnight or demand	Up to 1 month (excl. Overnight)	1 to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	TOTAL
ASSETS								
Cash and amounts due from central banks	-	185,351	-	-	-	-	-	185,351
Financial instruments at fair value through profit and loss								
Securities	121,986	-	-	-	-	-	-	121,986
Loans and repurchase agreements	-	39,275	89,897	34,508	16,681	3,294	2,211	185,867
Derivative financial instruments	233,148	-	-	-	-	-	-	233,148
Derivatives used for hedging purposes	9,763	-	-	-	-	-	-	9,763
Financial assets at fair value through equity								
Debt securities	110	54	988	1,038	8,857	20,448	25,752	57,246
Equity securities	2,151	-	-	-	-	-	-	2,151
Financial assets at amortised cost								
Loans and advances to credit institutions	-	6,395	4,779	2,822	2,635	3,030	115	19,776
Loans and advances to customers	-	20,927	58,280	62,043	109,839	289,935	234,586	775,611
Debt securities	-	79	3,187	3,575	8,804	30,749	29,773	76,167
Remeasurement adjustment on interest rate risk hedged portfolios	2,798	-	-	-	-	-	-	2,798
Financial assets	**369,956**	**252,080**	**157,131**	**103,986**	**146,817**	**347,457**	**292,437**	**1,669,864**
Other non-financial assets	36,304	9,840	12,411	8,643	12,807	59,898	15,788	155,691
TOTAL ASSETS	**406,260**	**261,920**	**169,543**	**112,629**	**159,624**	**407,355**	**308,225**	**1,825,555**
LIABILITIES								
Deposit from central banks	-	1,354	-	-	-	-	-	1,354
Financial instruments at fair value through profit and loss								
Securities	75,189	-	-	-	-	-	-	75,189
Deposits and repurchase agreements	-	11,464	152,756	28,146	5,981	3,563	2,129	204,039
Issued debt securities	-	2	1,538	1,873	6,950	26,321	14,438	51,121
Derivative financial instruments	226,040	-	-	-	-	-	-	226,040
Derivatives used for hedging purposes	11,738	-	-	-	-	-	-	11,738
Financial liabilities at amortised cost								
Deposits from credit institutions	-	10,179	13,052	8,733	4,842	35,812	906	73,524
Deposits from customers	-	628,059	70,809	51,847	31,502	16,713	4,108	803,037
Debt securities	-	277	7,520	33,556	44,662	43,344	26,794	156,153
Subordinated debt	-	-	2	2	235	561	15,166	15,966
Remeasurement adjustment on interest rate risk hedged portfolios	2,470	-	-	-	-	-	-	2,470
Financial liabilities	**315,437**	**651,335**	**245,677**	**124,156**	**94,172**	**126,314**	**63,541**	**1,620,631**
Other non-financial liabilities	99,591	10,235	18,406	10,460	7,516	38,867	19,848	204,924
TOTAL LIABILITIES AND EQUITY	**415,028**	**661,570**	**264,083**	**134,616**	**101,688**	**165,181**	**83,389**	**1,825,555**

For the management of liquidity risk, the above schedule is supplemented with economic analyses taking into consideration customer behaviour and the market liquidity of certain assets (such as securities), under normal conditions and stress situations.

To this effect, the Group uses a set of tools to anticipate and manage its financial liquidity, in particular as previously indicated:

- medium to long-term liquidity status;
- stress tests and liquidity reserve;
- monitoring compliance with regulatory liquidity ratios.

The following table shows details of Table 94: *Contractual maturities of the prudential balance sheet* across the scope of the Group's capital instruments and medium- and long-term debt securities, without taking into account early redemption options.

TABLE 95: CONTRACTUAL MATURITIES OF CAPITAL INSTRUMENTS AND MEDIUM- AND LONG-TERM DEBT SECURITIES IN THE PRUDENTIAL SCOPE (EU TLAC2)

In millions of euros	TOTAL 31December 2019	2020	2021	2022	2023	2024	2025-2029	Beyond 2029	Perpetual
Amount(*) of liabilities eligible to Additionnal Tier 1	**9,535**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**9,535**
Subordinated debt	**773**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**773**
of which subordinated debt at amortised cost	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
of which subordinated debt at fair value through profit and loss	*773*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*773*
Preferred shares and Undated Super Subordinated Notes	**8,762**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**8,762**
Amount(*) of debt eligible to Tier 2	**18,274**	**342**	**19**	**440**	**5**	**918**	**12,172**	**4,379**	**-**
Subordinated debt	**18,274**	**342**	**19**	**440**	**5**	**918**	**12,172**	**4,379**	**-**
of which subordinated debt at amortised cost	*18,154*	*274*	*8*	*423*	*5*	*918*	*12,172*	*4,354*	*-*
of which subordinated debt at fair value through profit and loss	*121*	*68*	*11*	*17*	*-*	*-*	*-*	*25*	*-*
Amount(*) of debt not eligible to prudential own funds	**165**	**28**	**14**	**16**	**17**	**19**	**70**	**-**	**-**
Unsecured Senior debt	**129,494**	**24,054**	**11,999**	**18,286**	**17,950**	**11,963**	**37,628**	**7,614**	**-**
Non-preferred senior debt	**41,028**	**740**	**117**	**2,942**	**5,921**	**5,826**	**23,319**	**2,163**	**-**
of which non preferred senior debt at amortised cost	*40,263*	*739*	*117*	*2,942*	*5,921*	*5,826*	*23,318*	*1,400*	*-*
of which non preferred senior debt at fair value through profit and loss	*765*	*1*	*-*	*-*	*-*	*-*	*1*	*763*	*-*
Preferred senior debt	**88,466**	**23,314**	**11,882**	**15,344**	**12,029**	**6,137**	**14,309**	**5,451**	**-**
of which preferred senior debt at amortised cost	*34,258*	*10,471*	*4,205*	*7,376*	*6,446*	*1,628*	*3,804*	*328*	*-*
of which preferred senior debt at fair value through profit and loss	*54,208*	*12,843*	*7,677*	*7,968*	*5,583*	*4,509*	*10,505*	*5,123*	*-*
Secured Senior debt (at amortised cost)	**25,238**	**4,807**	**7,115**	**2,943**	**2,498**	**2,089**	**3,053**	**2,733**	**-**

(*) Accounting value before any prudential adjustments.

Tables providing details of instruments recognised as capital (CET1, AT1 and Tier 2), as well as debt instruments eligible for TLAC ratio (senior non-preferred debt), as required (EU CCA) by implementing Regulation (EU) No. 1423/2013, are available in the BNP Paribas Debt section of the Investor Relations website: https://invest.bnpparibas.com/en/debts/tier-1-hybrids-subordinated-debt/capital-instruments-main-features-template.

Some debt instruments shown above have an early redemption ("call") option exercisable by the Group (Issuer). The following table shows the maturity schedule for debt and other subordinated liabilities by considering, where appropriate, the next date on which the option may be exercised ("call date"). Calls may only be exercised after authorisation from the regulator. The maturity dates shown hereafter are purely conventional and do not prejudice the Group's call policy.

TABLE 96: ECONOMIC(*) MATURITIES OF CAPITAL INSTRUMENTS (PRUDENTIAL PERIMETER(**))

In millions of euros	TOTAL 31 December 2019	2020	2021	2022	2023	2024	2025-2029	Beyond 2029	Perpetual
Amount(**) of liabilities eligible to Additionnal Tier 1	9,535	851	1,325	1,460	-	1,326	2,980	820	773
Subordinated debt	773	-	-	-	-	-	-	-	773
of which subordinated debt at amortised cost	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
of which subordinated debt at fair value through profit and loss	*773*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*773*
Preferred shares and Undated Super Subordinated Notes	8,762	851	1,325	1,460	-	1,326	2,980	820	-
Amount(**) of debt eligible to Tier 2	18,274	519	1,795	1,227	530	1,131	10,776	2,297	-
Subordinated debt	18,274	519	1,795	1,227	530	1,131	10,776	2,297	-
of which subordinated debt at amortised cost	*18,154*	*451*	*1,784*	*1,209*	*530*	*1,131*	*10,776*	*2,272*	*-*
of which subordinated debt at fair value through profit and loss	*121*	*68*	*11*	*17*	*-*	*-*	*-*	*25*	*-*
Amount(**) of other subordinated debt not eligible to prudential own funds	165	28	14	16	17	19	70	-	-

(*) The economic maturity is defined as either the contractual maturity or the next call date when the instrument has an early redemption option.
(**) Carrying amount before any prudential adjustments.

ENCUMBRANCE OF GROUP ASSETS AND ASSETS RECEIVED BY THE GROUP

Assets on the balance sheet and financial instruments received in guarantee used as pledges, guarantees or enhancement of a Group transaction and which cannot be freely withdrawn are considered to be encumbered.

The encumbrance of assets is central to the Group's businesses and has two aims:

- to trade in derivatives or repurchase agreements, with the payment of initial margins and margin calls to secure transactions (see paragraphs on *Bilateral initial margin exchange* and *Counterparty credit risk management* of section 5.6 *Counterparty credit risk*);
- to obtain funding, by issuing secured debt, in particular asset-backed securities (see *Proprietary securitisation (originator)* in section 5.5 *Securitisation in the banking book*), covered bonds (see paragraph on *MLT secured wholesale funding* in this section) or by participating in monetary policy operations (TLTRO), thus diversifying and optimising its funding structure.

The encumbrance of assets can be distinguished from the transfer of assets shown in note 5.r to the consolidated financial statements insofar as it only comprises the following transactions:

- securities recognised in the bank's balance sheet, which have been sold or loaned, on a temporary basis, by the Bank under repurchase agreements (repos and securities lending) but which have not been derecognised in the Bank's balance sheet once the transaction is complete;
- assets securitised by the bank (whatever the significance level of the transfer of risk), which continue to be recognised in the bank's balance sheet under the applicable consolidation rules contained in the accounting standard, to hedge the issue of asset-backed securities.

Based on the definitions above, guarantees given to clearing houses or central banks in the context of monetary policy, along with asset portfolios hedging the issue of secured bonds, fall within the scope of the encumbrance of assets but do not fall within the scope of asset transfers. The same applies to repurchase agreements (repos) and loans in the case of securities that are not recognised in the Bank's balance sheet (because they were previously received under reverse repos and securities borrowing) and to securities received under repurchase agreements (reverse repos) and securities borrowings.

ENCUMBRANCE OF ASSETS AND COLLATERAL RECEIVED

The monitoring of encumbered assets and assets received is carried out within the prudential scope defined in the section *Scope of application* in section 5.2 *Capital management and capital adequacy*.

The amount of encumbered and unencumbered assets and collateral received are shown in the following table according to the provisions of the Delegated Regulation (EU) 2017/2295. Thus, all data shown in the table are calculated as the median of the four quarter ends of the year. Each total line is then calculated as the median of the total at the four quarter-ends of the year, not as the sum of the median values for the year.

The median ratio of encumbered assets relative to Group balance sheet assets was 16% in 2019 stable compared to 2018.

➤ TABLE 97: ENCUMBERED AND UNENCUMBERED ASSETS AND COLLATERAL RECEIVED

➤ *Assets*

In millions of euros		Four end of quarter median values in 2019							
		Carrying amount of encumbered assets	of which HQLA and EHQLA(*)	Fair value of encumbered assets	of which HQLA and EHQLA(*)	Carrying amount of unencumbered assets	of which HQLA and EHQLA(*)	Fair value of unencumbered assets	of which HQLA and EHQLA(*)
010	**ASSETS**	**339,695**	**145,154**			**1,759,235**	**409,945**		
030	Equity instruments	49,943	30,006			18,961	1,599		
040	Debt securities	133,353	114,298	133,353	114,298	138,749	117,738	138,749	117,738
050	*of which covered bonds*	*2,069*	*1,393*	*2,069*	*1,393*	*2,982*	*2,166*	*2,982*	*2,166*
060	*of which asset-backed securities*	*1,276*	*445*	*1,276*	*445*	*6,867*	*324*	*6,867*	*324*
070	*of which issued by general governments*	*110,321*	*110,057*	*110,321*	*110,057*	*101,172*	*96,951*	*101,172*	*96,951*
080	*of which issued by financial corporations*	*19,273*	*3,210*	*19,273*	*3,210*	*20,304*	*3,825*	*20,304*	*3,825*
090	*of which issued by non-financial corporations*	*6,886*	*1,506*	*6,886*	*1,506*	*11,112*	*290*	*11,112*	*290*
120	Other assets	156,408	-			1,601,414	291,681		

(*) Assets of extremely high liquidity and credit quality.

In millions of euros		Four end of quarter median values in 2018			
		Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
010	**ASSETS**	**314,515**		**1,654,754**	
030	Equity instruments	42,570		27,248	
040	Debt securities	123,074	123,074	116,435	116,435
050	*of which covered bonds*	*1,221*	*1,221*	*2,210*	*2,210*
060	*of which asset-backed securities*	*723*	*723*	*5,596*	*5,596*
070	*of which issued by general governments*	*99,678*	*99,678*	*82,514*	*82,514*
080	*of which issued by financial corporations*	*13,960*	*13,960*	*20,278*	*20,278*
090	*of which issued by non-financial corporations*	*5,844*	*5,844*	*10,208*	*10,208*
120	Other assets	144,863		1,505,838	

In median amounts over 2019, other encumbered assets mainly comprised loans and advances (often used when issuing asset-backed securities issues or guaranteed bonds) and amounted to EUR 93 billion, and guarantee deposits and bank guarantees paid in respect of derivatives (recognised in the Accrued income and other assets category) amounting to EUR 63 billion.

The portion of unencumbered assets not available for use as collateral, for guarantees or to enhance transactions include, in the main, derivative financial instruments, intangible assets, goodwill, current and deferred tax assets, and assets ineligible for financing programmes under normal business conditions.

Collateral

In millions of euros		Four end of quarter median values in 2019				Four end of quarter median values in 2018	
		Fair value of encumbered collateral received or own debt securities(*) issued	of which HQLA and EHQLA(**)	Fair value of collateral received or own debt securities(*) issued available for encumbrance	of which HQLA and EHQLA(**)	Fair value of encumbered collateral received or own debt securities(*) issued	Fair value of collateral received or own debt securities(*) issued available for encumbrance
130	**COLLATERAL RECEIVED**	**379,806**	**333,667**	**97,450**	**71,132**	**364,336**	**62,827**
140	Loans on demand	-	-	-	-	-	-
150	Equity instruments	46,859	26,449	18,022	10,968	55,782	9,054
160	Debt securities	335,940	308,786	79,441	61,146	306,748	53,771
170	*of which covered bonds*	*1,107*	*888*	*1,605*	*1,103*	*222*	*978*
180	*of which asset-backed securities*	*3,932*	*154*	*3,951*	*712*	*4,348*	*372*
190	*of which issued by general governments*	*305,176*	*303,983*	*55,601*	*55,601*	*279,457*	*36,889*
200	*of which issued by financial corporations*	*19,405*	*2,494*	*22,197*	*2,523*	*16,248*	*14,342*
210	*of which issued by non-financial corporations*	*14,787*	*3,078*	*-*	*-*	*11,105*	*4,382*
220	Loans and advances other than loans on demand	-	-	-	-	-	-
230	Other collateral received	-	-	-	-	-	-
240	**OWN DEBT SECURITIES (*) ISSUED OTHER THAN OWN COVERED BONDS OR ASSET-BACKED SECURITIES**	**-**	**-**	**-**	**-**	**-**	**-**
241	**OWN COVERED BONDS (*) AND ASSET-BACKED SECURITIES AND NOT YET PLEDGED**			**31,527**	**-**		**34,620**
250	**TOTAL ASSETS, COLLATERAL PLEDGED AND OWN DEBT SECURITIES (*) ISSUED**	**719,500**	**478,821**			**683,895**	

(*) Financial assets issued by a Group entity and subscribed to by the Group.
(**) Assets of extremely high liquidity and credit quality.

For a median value over 2019, the amount of own covered bonds and asset-backed securities (ABS) was EUR 52 billion with underlying outstanding assets of EUR 53 billion.

Encumbered assets/collateral received and associated liabilities

In millions of euros		Four end of quarter median values in 2019		Four end of quarter median values in 2018	
		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued(*)	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued(*)
010	**CARRYING AMOUNT OF SELECTED FINANCIAL LIABILITIES**	**634,775**	**719,500**	**613,704**	**683,895**

(*) Other than collateralized debt obligations and securities backed by encumbered assets.

The corresponding liabilities, contingent liabilities or securities lent are issued mainly by public authorities, for a median value of EUR 396 billion over 2019. The encumbered assets, collateral received and own securities issued other than covered bonds or securities backed by encumbered assets concern public authorities for an amount of EUR 415 billion.

The FICC and Prime Solutions & Financing businesses as well as Securities Services represent, in median value terms over 2019, 69% of the Group's encumbered assets (EUR 234 billion) and 99% of the collateral received (EUR 377 billion), *i.e.* 85% of the encumbrance (EUR 611 billion). This is mainly repo and derivative activity. The other encumbered assets are mainly through financing and Treasury ALM.

The Group's encumbered assets and received and encumbered collateral are denominated mainly in euros or dollars (for a median amount of 40% and 41% respectively over the year).

5.9 Operational risk

Operational risk is the risk of incurring a loss due to inadequate or failed internal processes, or due to external events, whether deliberate, accidental or natural occurrences. Management of operational risk is based on an analysis of the "cause – event – effect" chain.

Internal processes giving rise to operational risk may involve employees and/or IT systems. External events include, but are not limited to floods, fire, earthquakes and terrorist attacks. Credit or market events such as default or fluctuations in value do not fall within the scope of operational risk.

Operational risk encompasses fraud, human resources risks, legal risks, non-compliance risks, tax risks, information system risks, conduct risks (risks related to the provision of inappropriate financial services), risk related to failures in operating processes, including loan procedures or model risks, as well as any potential financial implications resulting from the management of reputation risk.

REGULATORY FRAMEWORK

Operational and compliance risks come under a specific regulatory framework:

- Directive 36/2013/UE (CRD 4) and Regulation (EU) No. 575/2013 (CRR) governing prudential supervision and the methods for calculating the amount of capital requirements to cover the operational risk;
- French Ministry of Finance Decree of 3 November 2014, which defines the roles and responsibilities of the RISK Function (covering all types of risks) and an internal control system which ensures the efficiency and quality of the Bank's internal operations, the reliability of internal and external information, the security of transactions, as well as compliance with applicable laws, regulations and internal policies.

Banking regulation divides operational loss events into seven categories: (i) internal fraud, (ii) external fraud, (iii) employment practices and workplace safety (such as an anomaly arising from recruitment management), (iv) clients, products and business practices (such as product defects, mis-selling, professional misconduct, etc.), (v) damage to physical assets, (vi) business disruption and system failures, (vii) execution, delivery and process management (data entry error, error in documentation, etc.).

Effective management of compliance risk aims to ensure compliance with applicable laws, regulations, rules of ethics and instructions, protect the Group's reputation, that of its investors and that of its customers, ensure ethical professional behaviour, prevent conflicts of interest, protect customers' interests and market integrity, fight against money laundering, corruption and the financing of terrorist activities, as well as ensure compliance with financial embargos.

ORGANISATION AND OVERSIGHT MECHANISM

KEY PLAYERS AND GOVERNANCE

The general internal control system at BNP Paribas underpins management of operational, compliance and reputation risks as part of its dual-level system to ensure periodic and permanent control.

Compliance, LEGAL, RISK and General Inspection form the Group's four supervision and control functions, with direct reporting of all their teams worldwide, guaranteeing their independence and resource autonomy.

The governance of the Group's internal control system is described in the section *Internal control* in chapter 2 *Internal Control and Corporate Governance*.

A second-level control function is tasked with defining and supervising the operational risk management system. Accordingly, the Operational Risk and Control (RISK ORC) teams are now the second line of defence within RISK. In addition, a dedicated team (RISK ORC Information and Communication Technology), reporting to the Head of RISK, is in charge of the second line of defence on technology risks and data protection (cyber security).

The operational risk management and control system for the Group as a whole is structured ,around a two-level system with the following participants:

- on the first level of defence: operational staff, notably the Heads of operational entities, business lines and functions, who are on the front-line of risk management and implementation of systems to manage these risks;
- on the second line of defence: specialist decentralised teams (domains, divisions, operational entities, business lines, functions and regions) coordinated centrally by the RISK ORC Group team involved in managing the Group's risks.

These teams are, in particular, responsible for:

- coordinating, throughout the areas within their remit, the definition and implementation of the permanent control and operational risk identification and management system, its standards and methodologies, reporting and related tools;
- acting as a second pair of eyes, independently of the Heads of operational entities, to scrutinise operational risk factors and the functioning of the operational risk and permanent control system, and issuing warnings, where appropriate.

Issues relating to operational risk, permanent operational control and the emergency plan to ensure business continuity in those situations specified in the regulatory standards are regularly submitted to the Group's Executive Committee. The Group's operational entities and subsidiaries implement this governance structure within their organisations, with the participation of Executive Management.

For its part, Compliance is in charge of supervising the compliance and reputation risk control system (see section 5.3).

OBJECTIVES AND PRINCIPLES

To meet this dual requirement of the management and control of operational risk, BNP Paribas has developed a permanent iterative risk management process based on the following elements:

- identifying and assessing operational risks;
- formalisation, implementing and monitoring the risk mitigation system, including procedures, checks and all organisational elements designed to help to control risk, such as segregation of tasks, management of access rights, etc.;
- producing measures of known and potential risks and calculating the capital requirement for operational risk;
- reporting and analysing oversight information relating to operational risk and the permanent control system;
- managing the system through a governance framework that involves members of management, preparing and monitoring action plans.

This system rests on two major pillars:

- the identification and assessment of risk and of the control system based on the libraries of risks and controls defined by the Group's business lines and functions, and which each entity must take into consideration and enhance, if necessary, for their own underlying and residual risk mapping and for the standardised impact assessment grid applicable across the Group;
- the risk management system is underpinned by procedures, standards and generic control plans consistent with the above-mentioned risk libraries, and which each entity must apply, unless an exception is authorised, and enhance according to their own characteristics.

SCOPE AND NATURE OF RISK REPORTING AND MEASUREMENT

Group Executive Committees, and those of operational entities (business lines, functions and subsidiaries) are tasked with monitoring the management of operational and non-compliance risk and permanent control in the areas falling within their remit, in accordance with the Group's operational risk framework. The committees validate the quality and consistency of reporting data, examine their risk profile in light of the tolerance levels they have set in keeping with the Group Risk Appetite Statement, and assess the quality of risk control procedures according to their objectives and the risks they incur. They monitor the implementation of risk mitigation techniques.

Operational risk management has developed a system of data collection of actual or potential incidents using an approach structured by organisational process and business unit (activities in a country and a single legal entity) focusing on the cause-and-effect chain behind events. This information is used as the basis for risk mitigation and prevention measures.

The most significant information is brought to the attention of staff at various levels of the organisation, up to and including executive managers and supervisory bodies, in line with a predefined information reporting process.

SPECIFIC COMPONENTS LINKED TO OPERATIONAL RISK

By its nature, operational risk covers numerous areas related with the Group's usual business activity and is linked to specific risks such as compliance, reputation, legal, fiscal and cyber security risks which are monitored in specific ways.

COMPLIANCE AND REPUTATION RISK

Compliance risk is defined in French regulations as the risk of legal, administrative or disciplinary sanctions, of significant financial loss or reputational damage that a bank may suffer as a result of failure to comply with national or European laws and regulations, codes of conduct and standards of good practice applicable to banking and financial activities, or instructions given by an executive body, particularly in application of guidelines issued by a supervisory body.

By definition, this risk is a sub-category of operational risk. However, as certain implications of compliance risk involve more than a purely financial loss and may actually damage the institution's reputation, the Bank treats compliance risk separately.

Reputation risk is the risk of damaging the trust placed in a corporation by its customers, counterparties, suppliers, employees, shareholders, supervisors and any other stakeholder whose trust is an essential condition for the corporation to carry out its day-to-day operations.

Reputation risk is primarily contingent on all the other risks borne by the Bank, specifically the potential materialisation of a credit or market risk, or an operational risk, as well as a violation of the Group's code of conduct.

In accordance with international standards and French regulations, Compliance manages the system for monitoring compliance and reputation risks for all of the Group's businesses in France and abroad. Compliance reports to the Chief Executive Officer and has direct, independent access to the Board's Internal Control, Risk and Compliance Committee.

Integrated globally, Compliance brings together all Group employees reporting to the function. Compliance is organised based on its guiding principles (independence; integration and decentralisation of the function; dialogue with the business lines; accountability of each of the Group's stakeholders; a culture of excellence) through three operating areas, three regions, six fields of expertise and five cross-functional activities.

All Compliance Officers in the various operational areas, regions, business lines and territories, fields of expertise and Group functions report directly to the Compliance Function.

This management of compliance and reputation risks is based on a system of permanent controls built on four components:

- general and specific procedures;
- coordination of action taken within the Group to guarantee the consistency and effectiveness of monitoring systems and tools;
- deployment of tools for detecting and preventing money laundering, terrorist financing and corruption, detecting market abuses, etc.;
- training, both at Group level and in the divisions and business lines.

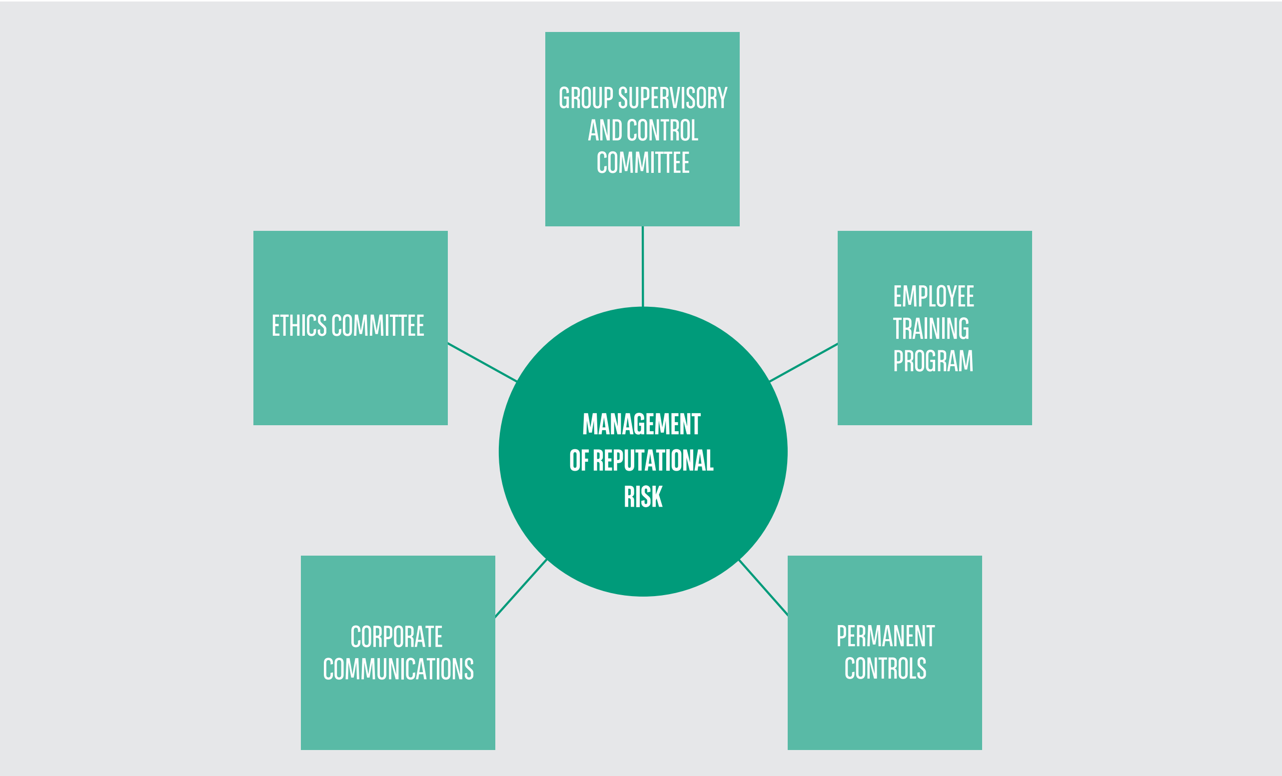
During 2019, the Group continued implementing this system, through the following initiatives:

- strengthening its Financial Security mechanism;
- continually increasing human and financial resources;
- continuation of its transformation by creating a committee dedicated to the industrialisation of IT compliance processes and the strengthening of its capacities;
- strengthening its resources in banking law and customers' tax compliance;
- continuing remediation plans launched as part of its settlements with French and U.S. authorities concerning international financial sanctions and foreign exchange.

(See chapter 2 *Corporate governance and internal control* in the *Internal Control* section.)

More specifically, reputation risk control is based on the following items:

FIGURE 13: REPUTATION RISK MANAGEMENT FRAMEWORK



- the Group Supervisory and Control Committee is chaired by the Chief Executive Officer. Its other members are the Chief Operating Officer and the Heads of the Compliance, RISK, LEGAL and General Inspection Functions. The Deputy Chief Operating Officers have standing invitations to attend. Its mission is to define rules of principle and policies, to contribute to the organisation of the control functions and the consistency between them and to ensure their overall consistency *vis-à-vis* the operating entities of the Group;
- the Ethics Committee is chaired by Jean-Marie Guéhenno, Chairman of the International Crisis Group. It is made up in equivalent proportion of members of the Group Executive Committee as well as independent outside individuals. The role of the Ethics Committee is to help formulate recommendations for the Group's code of conduct and business conducted in certain sensitive countries or business sectors;
- the employee training programme: the Group's employees have an essential role in managing the reputation risk. This awareness training includes identifying, controlling, and managing the reputation risk, the Group's Values, and its ethics standards;
- Corporate Communications: one of the major missions of Corporate Communication is to protect the reputation of the Group and its Entities, as well as being a source of information for employees and the public, whose trust is essential for the Group;
- permanent control: identifying and managing the reputation risk are part of the objectives of the permanent control system. Procedures and controls are closely monitored wherever the risk is highest. Whistleblowing procedures and periodic control recommendations are also taken into consideration. The reputation risk is also taken into account in the process for validating standard or non-standard transactions, new businesses, and new products. The Group has procedures for conflicts of interest; market integrity; adequacy and appropriateness of offers to clients; best execution of their orders; anti-money laundering, terrorist financing and corruption; compliance with international sanctions and embargoes; and social and environmental responsibility that, along with the code of conduct, are conducive to effective management of reputation risk.

LEGAL RISK

The Legal Function (LEGAL) is responsible for preventing and managing the Group's legal risks through its advisory and control roles.

Legal risk is defined as the Group's risk of suffering from a negative impact following:

- a potential conflict or a change in laws or regulations applicable to the Group's operations;
- a civil or criminal action or an investigation associated with an alleged breach, infringement of an applicable law or regulation or any other alleged breach of an obligation;
- an inability to ensure that a contractual agreement with a customer or a third party is respected.

LEGAL is organised around:

- a governance model based on:
  - the LEGAL Executive Board, a Committee that meets twice a month and manages strategic issues and oversees the LEGAL function's activities and decisions,
  - the LEGAL Executive Committee, a Committee that meets quarterly and helps to steer the LEGAL function and studies its key issues and topics;
- the Global LEGAL Risk Committee, which ensures that an appropriate system for legal risk management is in place in LEGAL;
- an oversight of legal risks via a number of actions:
  - management of a harmonised and robust system to manage global legal risks to provide overall supervision and proactive management of major legal risks, including namely defining a suitable system for *ex post facto* control by: (i) defining legal risk control plans, (ii) permanent control activities across all legal areas,
  - management of disputes, litigation and legal investigations,
  - provision of advice on the legal aspects of financial security,
  - constituting and managing panels of legal experts, *i.e.* selecting legal firms with which the Group works,
  - management and supervision of human resources litigation and disputes in various juridictions,
  - defining and ensuring the consistency of the Group's legal policy.

LEGAL is a global function made up of legal and paralegal teams located in around sixty countries, all reporting directly to the Group General Counsel.

The LEGAL Charter was updated in April 2018 and renewed in October 2019. The function is organised around the following principles:

- independence and integration:
  - all LEGAL Function employees report directly or indirectly to the Group General Counsel,
  - LEGAL manages its own budget and human resources processes in terms of recruitment, appointment, performance appraisal, compensation, mobility and disciplinary and operational management;
- delegation: the Group General Counsel delegates authority, whether directly or indirectly, to each member of the LEGAL Executive Committee, each within their own area of responsibility;
- cross-functionality: Legal Practices, specialised teams by area of legal expertise tasked with managing issues relative to the Group's businesses and geographies within LEGAL, and with escalating major legal risks that fall within their scope, (Group Dispute Resolution, Company Law, Mergers and Acquisitions, Information Technology and Intellectual Property, Legal and Regulatory Intelligence and Competition Law) The role of Legal Practice Regulatory Risk & Advisory is to monitor, from a regulatory perspective, all proposed and adopted laws, case law and other regulatory and legal changes that may impact the Group or its businesses, in conjunction with the other functions;
- responsibility:

  lawyers are responsible for managing legal risks in the Group:
  - there is a comprehensive and unified legal organisation at all levels of the Group to provide adequate cover of legal risks,
  - each lawyer is responsible for ensuring that all major risks encountered are escalated within the LEGAL Function,
  - the Practice Group Dispute, a global team (integrated in line with management terms) so as to ensure management tailored to the Group's major disputes and investigations as well as legal issues associated with financial security (such as embargoes and anti-money laundering).

TAX RISK

In each country where it operates, BNP Paribas is bound by specific local tax regulations applicable to companies engaged for example in banking, insurance or financial services.

The Tax Function ensures at a global level that the tax risk is managed throughout all of the transactions conducted by the Group. In view of the financial and reputational stakes, Finance and Compliance are involved in the tax risk monitoring process.

The Group Tax Department carries out the tax function and calls on the assistance of tax managers in certain businesses and in the main geographical areas where the Group operates (as well as tax correspondents in other geographical areas where the Group operates).

In ensuring the coherence of the Group's tax practices and the global tax risk monitoring, the Group Tax Department:

- has drawn up procedures covering all divisions, designed to ensure that tax risks are identified, addressed and controlled appropriately;
- has implemented a process of feedback aimed at contributing to the control of local tax risk;
- reports to Executive Management on tax risk developments;
- oversees the tax-related operational risks and the internal audit recommendations falling within the Tax Function's scope of responsibility.

A Tax Coordination Committee, involving Finance and Compliance and, on an as-needed basis, the businesses, is tasked with analysing the main tax issues with respect to the transactions the Group performs.

CYBER SECURITY AND TECHNOLOGY

The use and protection of data and technologies are determining factors for the Bank's activity and its transformation process.

While the Bank continues the roll-out of Digital Banking (for the Group's customers and partners) and Digital Working (for the Group's employees), it must incorporate new technology and innovative risk management practices, and establish new working methods. This introduces new technology risks in the cyber security arena.

Technology management and information systems security is part of the Group's cyber security strategy. This strategy is focused on the preservation of the most sensitive data, regularly adapting both its internal processes and procedures, and its employee training and awareness to contend with increasingly sophisticated and varied threats.

To best protect its technology and data, the Group has adopted a comprehensive approach in cyber security management through its three lines of defence:

- operational entities are the first line of defence. Since 2015, the Group has introduced across all of the entities a transformation programme based on the international standard NIST (National Institute of Standards and Technology). This programme is regularly updated taking into account the new threats and recent incidents identified around the world;
- as a second line of defence, the team dedicated to managing cyber security and technology risk (RISK ORC ICT), reporting to the Chief Cyber and Technology Risk Officer, is tasked with:
  - presenting the Group's cyber security and technology risk position to the Group Executive Committee, the Board of directors, and the supervisory authorities,
  - monitoring the transformation programme across the entire Group,
  - integrating the cyber security and technology risk aspects into all major projects within the Group,
  - ensuring that policies, principles and major projects take aspects of cyber security and technology risk into consideration,
  - monitoring existing risks and identifying new threats likely to have a negative impact on the Group's business,
  - overseeing third-party information systems risks within a strengthened framework,
  - conducting independent assessment campaigns on priority objectives,
  - taking measures to assess and improve the Group's ability to respond to failings and incidents;
- as the third line of defence, the role of General Inspection is to:
  - assess the processes put in place to manage ICT risks, as well as associated controls and governance,
  - check for compliance with laws and regulations,
  - propose areas of improvement to support the mechanisms put in place.

The Group is responding to new technological and cybersecurity risks as follows:

- availability and continuity risks:

  BNP Paribas relies heavily on communication and information systems across all its business activities. Any breach in the security of these systems could lead to failures or interruptions in the systems used to manage customer relations or to record transactions (deposits, services and loans) and could incur major costs to recover and verify compromised data. The Group regularly manages, improves and checks its crisis management and recovery plans, by testing its data recovery services and the robustness of its information systems, using various scheduled stress scenarios;
- security risks:

  the Bank is vulnerable to cybersecurity risk, or risk caused by malicious and/or fraudulent acts, committed virtually, with the intention of manipulating information (confidential, bank/insurance, technical or strategic data), processes and users, that may result in material losses for the Group's subsidiaries, employees, partners and customers. The Group continually reassesses all threats (increasing over time and in terms of their sophistication) and corrects the risks detected in good time by means of taking effective counter measures;
- change-related risks:

  the Group's information systems are changing rapidly in the light of digital transformation. These risks, identified during the systems' design or modification phases, are regularly assessed to ensure that the proposed solutions are consistent with the needs of the Group's business lines;
- data integrity risks:

  confidentiality of customer data and transaction integrity are areas covered by the same systems set up in response to Regulation (EU) No. 2016/679 of 27 April 2016 (General Data Protection Regulation – GDPR) intended to provide the Group's customers with a service that meets their expectations;
- third-party information systems risks:

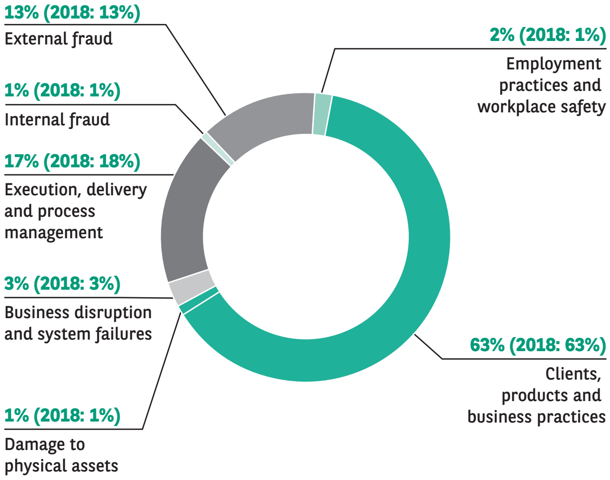
  the Bank is exposed to risks of default, breaches or operational capacity constraints when it interacts with third parties, including customers, financial intermediaries and other market operators. The Group's three lines of defence manage these risks at every step of third-party information system integration until the end of the relationship.

The Group addresses both technological and cyber security risks as well as the requirements of the laws, regulations, and standards in force.

OPERATIONAL RISK EXPOSURE

The chart below shows the losses linked to operational risk, according to the event classification defined in the current regulation.

FIGURE 14: OPERATIONAL LOSSES – BREAKDOWN BY EVENT TYPE (AVERAGE 2011-2019)(*)



(*) Percentages in brackets correspond to average loss by type of event for the 2010-2018 period.

In the period 2011-2019, the main type of operational risk falls within the category of "Clients, products and business practices", representing on average more than half of the Group's financial impacts. The magnitude of this category is related to the financial terms of the comprehensive settlement concluded in June 2014 with the U.S. authorities with respect to the review of certain U.S. dollar transactions. Process failures, mainly including execution or transaction processing errors, and external fraud are the types of Group incidents with the second and third highest financial impact, respectively.

BNP Paribas Group pays the utmost attention to analysing its operational risk incidents in order to continuously improve its control system.

CAPITAL REQUIREMENT CALCULATION

Operational risk-weighted assets are calculated by multiplying the capital requirement by 12.5.

APPROACH ADOPTED

BNP Paribas uses a hybrid approach combining the Advanced Measurement Approach (AMA), standardised approach, and basic indicator approach.

In terms of net banking income, most legal entities within the Group's prudential scope of consolidation use the Advanced Measurement Approach (AMA). This includes most Retail Banking activities in the domestic networks and Private Banking, as well as Corporate and Institutional Banking.

Advanced Measurement Approach (AMA)

Under the AMA for calculating capital requirements, the Bank uses an internal operational risk model based on the four components required by the regulations, namely:

- internal historical loss data from operational risk;
- external loss data from operational risk;
- environmental and internal control factors;
- analysis of forward-looking scenarios, known as potential incidents in the BNP Paribas Group.

BNP Paribas' internal model in place since 2008 includes the following features:

- an aggregate annual loss distribution, meaning that the frequency and severity of losses from operational risks are modelled using an actuarial approach and according to distributions calibrated with available data;
- it uses historical data as well as prospective scenarios to calculate capital requirements, with a predominance for scenarios because they can be shaped to reflect severe and less frequent operational risks;
- the model is faithful to its operational risk input data, so that its results can be used easily by each of the Group's business lines. Most of the assumptions are therefore included in the data themselves;
- it is prudent in its capital requirement calculations: the input data are thoroughly reviewed, and any supplemental risk data are added if needed to cover all relevant operational risks within the Group.

Regulatory AMA capital requirements are calculated as VaR (Value at Risk), or the maximum potential loss over one year, at a 99.9% confidence level to calculate regulatory capital requirements. Capital requirements are calculated at an aggregate level using risk data from all Group entities in the AMA perimeter, then allocated to business lines and individual legal entities.

Since the second quarter of 2018, risk-weighted assets have been raised to the level of the standardised approach within the AMA scope.

Fixed-parameter approaches

BNP Paribas uses fixed-parameter approaches (basic or standard) to calculate the capital requirements for entities in the Group's prudential consolidation scope that are not covered by the internal model:

- basic approach: the capital requirement is calculated as the average over the past three years of a financial aggregate based on net banking income (the exposure indicator) multiplied by a unique alpha parameter set by the regulator (15% weighting);
- standardised approach: the capital requirement is calculated as the average over the past three years of a financial aggregate based on net banking income multiplied by factors set by the regulator and corresponding to each business category. For the purposes of this calculation, all the Group's business lines are broken down into eight regulatory business categories.

RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENT

➤ TABLE 98: OPERATIONAL RISK CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

In millions of euros	31 December 2019		31 December 2018		Variation	
	RWAs	Capital requirements	RWAs	Capital requirements	RWAs	Capital requirements
Advanced Measurement Approach (AMA)	54,278	4,342	56,935	4,555	(2,657)	(213)
Standardised approach	10,243	819	10,393	831	(150)	(12)
Basic indicator approach	4,371	350	5,619	450	(1,248)	(100)
TOTAL OPERATIONAL RISK	**68,891**	**5,511**	**72,947**	**5,836**	**(4,056)**	**(324)**

The EUR 4 billion decrease in risk-weighted assets related to operational risk in 2019 may be attributed mainly to the transition to consolidation under the equity method of the Group's non-regulated entities, leading to a EUR 3.5 billion reduction in risk-weighted assets, including EUR 2.4 billion in the AMA scope (after being risen to the standardised approach level).

RISK MITIGATION TECHNIQUES AND INSURANCE POLICIES

BNP Paribas Group deals with its insurable risks with the triple aim of protecting its balance sheet, its profit and loss account and its staff. Its insurance set-up is based on risk identification and assessment, underpinned by risk mapping and by analysis of operational loss profile, both historical and forward-looking.

The Group purchases insurance from leaders of the insurance market, covering computer crime, fraud, theft, business disruption, liability and other risks for which it may be held responsible. In order to optimise costs whilst effectively managing its exposure, the Group retains some well identified risks whose impact in terms of frequency and cost is known or can be adequately estimated.

In selecting insurers, the Group pays close attention to the credit rating and claims paying ability of the companies concerned. Detailed information on risks incurred by BNP Paribas as well as risk assessment visits, enable insurers to assess the quality risk prevention within the Group, as well as the safeguard measures put in place and upgraded on a regular basis in light of new standards and regulations.

5.10 Insurance risks

BNP PARIBAS CARDIF GROUP RISK MANAGEMENT SYSTEM

Risk management is a process that allows to identify, measure, monitor, manage, and report both the risks arising from the external environment as well as intrinsic risks inherent to the BNP Paribas Cardif group. The objective is to guarantee the solvency, business continuity, and development of the BNP Paribas Cardif group, under satisfactory conditions of risk and profitability.

Within the framework of the provisions of article L.354-2 of the French Insurance Code, the BNP Paribas Cardif group conducts a forward looking assessment of its solvency and risks every year under the Solvency II framework, in particular:

- the definition and evaluation of a capital requirement specific to the risk profile;
- the level of capital that the BNP Paribas Cardif group wishes to hold to cover this specific requirement, in excess of the regulatory capital requirement;
- the forward-looking solvency ratios under the medium-term plan;
- the resilience of these ratios in stress test cases.

Depending on the observed solvency ratio levels and the forecasts made under ORSA (Own Risk and Solvency Assessment), remedial actions may be undertaken to adjust own capital.

The risk typology adopted by the BNP Paribas Cardif group is changing in pace with methodological work and regulatory requirements. It is presented according to the main categories as follows:

- underwriting risk: underwriting risk is the risk of a loss in value caused by a sudden, unexpected increase in insurance claims. Depending on the type of insurance business (life, non-life), this risk may be statistical, macroeconomic or behavioural, or may be related to public health issues or disasters;
- market risk: market risk is the risk of a loss in value arising from adverse movements of financial markets. These adverse movements are notably reflected in price fluctuations (foreign exchange rates, bonds, equities and commodities, derivatives, real estate, etc.) and derived from fluctuations in interest rates, credit spreads, volatilities and correlations;
- liquidity risk: liquidity risk is the risk of being unable to fulfil current or future foreseen or unforeseen cash requirements coming from insurance commitments to policyholders, because of an inability to sell assets in a timely manner, for an acceptable amount without having a significant impact on market prices; and/or an inability to get access to alternative financing instruments in a timely manner;
- credit risk: credit risk is the risk of loss or adverse change in the financial situation resulting from fluctuations in the credit standing of issuers of securities, counterparties, and any debtors to which the BNP Paribas Cardif group is exposed. Among the debtors, risks related to financial instruments (including the banks in which the BNP Paribas Cardif group holds deposits) and risks related to receivables generated by the underwriting activities (premium collection, reinsurance recovering, etc.) are divided into two categories: assets credit risk and liabilities credit risk;
- operational risk: operational risk is the risk of loss resulting from the inadequacy or failure of internal processes, IT failures or external events, whether accidental or natural. These external events include those of human or natural origin.

The BNP Paribas Cardif group is exposed mainly to credit, underwriting, and market risks. The BNP Paribas Cardif group closely monitors its exposures and profitability, taking into account these various risks and the adequacy of its capital with regard to regulatory solvency requirements. It endeavours to contain potential losses in adverse scenarios at acceptable levels.

The risk strategy is implemented and monitored through an organisation tailored to the broad risk classes and supported by *ad hoc* governance structures. The governance and risk management systems are presented in sections B. *System of Governance* and C. *Risk profile* of the BNP Paribas Cardif group's Solvency and Financial Condition Report (SFCR), available on the institutional website at https://www.bnpparibascardif.com.

The solvency requirements for the BNP Paribas Cardif Group under Solvency II are shown in section 5.2 *Capital management and capital adequacy*.

MARKET RISK

Market risk arises mainly in the Savings business, where technical reserves represent most of the BNP Paribas Cardif group subsidiaries' liabilities.

Interest rate risk management for the general insurance funds and the asset diversification policy have driven investment in real estate assets, equities and fixed-income securities, including government bonds particularly in the euro zone countries.

Market risk falls into four categories:

- interest rate risk:

  underwritten life insurance policies are measured based on either a contractual fixed rate or a variable rate, with or without a minimum guaranteed return. All of these policies give rise to an interest rate and asset value risk, corresponding to the risk that the return on admissible assets (*i.e.* assets acquired by investing premiums) is less than the contractual return payable to policyholders. In France, the average rate guaranteed by Cardif Assurance Vie in 2019 is below 0.1%.

  In France, to cover for future potential financial losses, estimated over the lifetime of the policies, a provision for future adverse deviation *(provision pour aléas financiers)* is booked when total amount of technical interest plus the guaranteed return payable to policyholders through technical reserves is not covered by 80% of the return on the admissible assets. No provision for future adverse deviation was booked at 31 December 2019, 2018, or 2017, as the returns guaranteed by the insurance subsidiaries were low and the guarantees were for short periods, resulting in only limited exposure;

- liquidity risk:

  liquidity risk is managed centrally by the Asset/Liability Management unit. Asset-liability matching reviews are performed regularly to measure and manage the financial risks incurred. They are based on medium and/or long-term profit and loss account and balance sheet projections prepared using a range of economic scenarios. The results of these reviews are analysed in order to determine any adjustments to assets (through strategic allocation, diversification, use of derivatives, etc.) required to reduce the risks arising from changes in interest rates and asset values;

- spread risk:

  limits by issuer and rating type (investment grade, non investment grade) are monitored regularly. Issuer credit quality is also reviewed frequently;

- change in the value of assets:

  the exposure to the risk of a fall in asset values (interest rate, spread, equities, real estate) is mitigated by the mechanism of the deferred participating benefit, attached to the insurance contracts containing a participation feature.

GROUP BNP PARIBAS CARDIF INVESTMENTS

The BNP Paribas Cardif group manages EUR 176.1 billion at net book value *i.e.* EUR 178.0 billion at market value, through its subsidiaries in France, mainly Cardif Assurance Vie, representing EUR 138.8 billion, through its subsidiaries in Italy, mainly Cardif Vita, representing EUR 23.7 billion and its subsidiary in Luxembourg, Cardif Lux Vie (EUR 9.8 billion).

BNP Paribas Cardif group investments break down as follows:

➤ TABLE 99: BREAKDOWN OF BNP PARIBAS CARDIF GROUP INVESTMENTS (EXCLUDING INVESTMENTS IN UNIT-LINKED CONTRACTS) [Audited]

	31 December 2019		31 December 2018	
In millions of euros	Net book value	Market value	Net book value	Market value
Equities and variable-income securities (including UCI)	37,459	37,459	34,869	34,869
Real estate	5,028	6,609	4,838	5,842
of which buildings	*3,247*	*4,829*	*3,138*	*4,142*
of which shares in real estate companies	*1,780*	*1,780*	*1,700*	*1,700*
Government bonds and similar	58,618	58,949	53,960	54,368
Other bonds	72,545	72,559	65,707	65,723
Derivative instruments and other	2,458	2,458	2,140	2,140
TOTAL	**176,109**	**178,035**	**161,513**	**162,942**

TABLE 100: BOND EXPOSURE BY ISSUER AND ISSUER RATING (EXCLUDING INVESTMENTS IN UNIT-LINKED CONTRACTS AND EUROCROISSANCE CONTRACTS) [Audited]

Exposure by rating	31 December 2019			31 December 2018		
	Govies	Corporate	Total	Govies	Corporate	Total
AAA	3.3%	3.4%	6.7%	2.2%	5.0%	7.1%
AA	23.2%	7.9%	31.1%	24.1%	8.9%	33.0%
A	6.8%	25.4%	32.2%	6.3%	23.1%	29.5%
BBB	11.0%	15.9%	26.8%	13.1%	14.5%	27.6%
< BBB(*)	0.3%	2.9%	3.2%	0.2%	2.6%	2.8%
TOTAL	**44.5%**	**55.5%**	**100.0%**	**45.9%**	**54.1%**	**100%**

(*) Including non-rated bonds.

TABLE 101: EXPOSURE TO GOVERNMENT BOND AND SIMILAR BY COUNTRY (EXCLUDING INVESTMENTS IN UNIT-LINKED CONTRACTS AND EUROCROISSANCE CONTRACTS) [Audited]

Exposure by country *In millions of euros*	Rating	31 December 2019 Net book value	31 December 2018 Net book value
France	AA	24,331	22,331
Italy	BBB	13,711	14,683
Spain	A-	5,394	4,468
Belgium	AA-	3,347	3,289
Germany	AAA	1,291	1,303
Netherlands	AAA	1,251	1,125
Austria	AA+	1,286	1,350
Ireland	A+	1,016	990
Portugal	BBB	92	92
Other		6,352	3,841
TOTAL		**58,073**	**53,473**

Within the context of the amendment to IFRS 4 (see note 1.a *Accounting Standards*) the table below presents the gross book value of the BNP Paribas Cardif group's financial assets meeting the SPPI (Solely Payments of Principal and Interest) criterion, with the exception of the financial assets held for transaction purposes in accordance with IFRS 9 or whose management and performance assessment are based on fair value.

TABLE 102: FINANCIAL ASSETS MEETING THE SPPI CRITERION [Audited]

Rating *In millions of euros*	31 December 2019	31 December 2018
AAA	8,078	7,842
AA	39,406	37,593
A	34,969	29,783
BBB	32,781	30,427
< BBB(*)	2,353	2,679
TOTAL	**117,587**	**108,324**

(*) Including non-rated bonds.

For the non-Investment Grade or unrated financial assets which meet the cash flow criterion, the table below shows the fair value and gross book value in accordance with IAS 39 (in the case of the financial assets valued at amortised cost, not taking into account any value adjustments for impairment).

TABLE 103: NON-INVESTMENT GRADE FINANCIAL ASSETS MEETING THE SPPI CRITERION [Audited]

Rating *In millions of euros*	31 December 2019		31 December 2018	
	Gross book value	Market value	Gross book value	Market value
BB+	279	279	408	408
BB	21	21	179	179
BB-	212	212	2	2
B	21	21	-	-
Unrated	1,819	1,819	2,091	2,091
TOTAL	**2,353**	**2,353**	**2,679**	**2,679**

INSURANCE UNDERWRITING RISK

Underwriting risk arises mainly from the surrender risk in the savings business line, and in creditor insurance contracts for the protection business.

There are three types of underwriting risk:

SAVINGS – SURRENDER RISK

Savings contracts include a surrender clause allowing policyholders to request reimbursement of all or part of their accumulated savings. The insurer is thus exposed to the risk of surrender volumes being higher than the forecasts used for ALM purposes, leading to potential capital losses on asset disposals needed to finance excess surrenders.

The surrender risk is limited, however, as:

- policyholder behaviour is monitored on an ongoing basis, in order to regularly align the duration of assets with that of the corresponding liabilities and reduce the risk of abrupt, large-scale asset sales. Changes in assets and liabilities are projected over periods of up to forty years, in order to identify treasury mismatches and over or under covered maturities giving rise to a liquidity risk. These analyses are then used to determine the choice of maturities for new investments and the assets to be sold;
- the guaranteed revaluation of policies is completed by a participating benefit feature, partly discretionary, that raises the total return to a level in line with market benchmarks and reduces the risk of an increase in surrenders. The policyholders' surplus reserve is the mechanism in France that enables the surplus actually paid out to be pooled and spread between generations of policyholders and to manage the performance of contracts over time;
- the return on financial assets may be protected through the use of hedging instruments.

TABLE 104: AVERAGE REDEMPTION RATES FOR BNP PARIBAS CARDIF GROUP GENERAL FUNDS(*) [Audited]

	Annual redemption rate	
	2019	2018
France	5.3%	5.2%
Italy	7.7%	8.9%
Luxembourg	5.2%	5.8%

(*) Individual savings.

SAVINGS – UNIT-LINKED CONTRACTS WITH A GUARANTEED MINIMUM BENEFIT

The insurer's liabilities are covered by the assets held, that are used as a valuation reference. The consistency of this coverage is controlled at monthly intervals.

Certain unit-linked commitments provide for the payment of a death benefit at least equal to the cumulative premiums invested in the contract, whatever the conditions on the financial markets at the time of the insured's death. The risk on these contracts is both statistical (probability of a claim) and financial (market value of the units).

The capital guarantee is generally subject to certain limits. In France, for example, most contracts limit the guarantee to one year (renewable annually), an age limit of eighty to benefit from the guarantee and a maximum of EUR 1 million per insured.

The minimum guaranteed benefit reserve is (re)assessed every quarter and takes into account the probability of death, based on a deterministic scenario, and stochastic analyses of changing financial market prices. The reserve amounted to EUR 7.7 million at 31 December 2019 (versus EUR 10.6 million at 31 December 2018).

PROTECTION

These risks result mainly from the sale of creditor insurance, as well as personal risk insurance (individual death and disability, extended warranty, theft, accidental damage, third party liability, annuity policies in France), with geographic coverage in many countries.

Creditor insurance mainly covers death, disability, critical illness, work disability, loss of employment and financial loss risks for revolving credit, personal loans and mortgage loans. The insurance book comprises a very large number of policies representing low risks and low premiums. Margins depend on the size of the insurance book, effective pooling of risks and tight control of administrative costs. The term of these contracts is usually equal to the term of the underlying loan and the premium is either deducted once upon issuance of the policy (single premium) or deducted regularly throughout the term of the policy (regular or periodic premiums).

Other contracts (individual death and disability, extended warranty, theft, accidental damage, and annuity policies in France) are either for personal risk (death, accidental death, hospitalisation, critical illness, healthcare expenses) or property & casualty risk (accidental damage, breakdown or theft of consumer goods or vehicles). The individual sums insured under these contracts are generally low, whether they are indemnities or lump-sum payments.

Lastly, principally through its expanding entities in France and Italy, Cardif IARD, and CARGEAS respectively, motor vehicle coverage (material damage, civil liability) and comprehensive household coverage are also underwritten. This type of insurance coverage is also developing in the international market, namely in Latin America.

The actuarial oversight system set up to prevent and control actuarial risks in France and internationally is based on guidelines and tools that describe the principles, rules, methods and best practices to be followed by each actuary throughout the policies' life cycle, the tasks to be performed by the actuaries and their reporting obligations. It also sets out the practices that are excluded or that are allowed only if certain conditions are met.

Risks underwritten must comply with delegation limits set at various local and central levels depending on the estimated maximum acceptable losses, the estimated Solvency II capital requirements and the estimated margins on the policies concerned. The experience acquired in managing geographically diversified portfolios is used to regularly update risk pricing databases comprising a wide range of criteria (loan type for creditor insurance, guarantee and insured population, etc.). Each contract is priced by reference to the profitability and return-on-equity targets set by the Executive Management of the BNP Paribas Cardif group.

Reinsurance is a complementary element of the underwriting risk management system. Its objective is to protect the BNP Paribas Cardif group against three main risks:

- so-called "peak" risk from exposure to an individual risk exceeding a certain threshold, called "full retention". In personal insurance, this threshold is currently set at EUR 2 million per life. The reinsurance of peak risk may take the form of surplus or excess of loss treaties;
- the catastrophe risk associated with exposure to a single low occurrence event, but very strong financial impact (concentration risk). This risk can be reinsured in the form of a catastrophe excess of loss treaty;
- risk on new products, linked to insufficient pooling, lack of mastery of the technical databases or uncertainty on beneficiaries' data. This risk can be reinsured in the form of quota share, stop loss or excess of loss treaties, depending on the level of risk identified.

Risk exposures are monitored periodically by the Executive Committee of the BNP Paribas Cardif group through the Commitment Monitoring Committees that are based on a two-pronged approach:

- quarterly monitoring of loss ratios at each accounting quarter end;
- supplemented by monitoring of the portfolio characteristics according to a schedule based on the type of product (monthly, quarterly or annually).

Contract pricing for annuity contracts are based on mortality tables applicable under insurance regulations, adjusted in some cases by portfolio specific data which is certified by independent actuaries. The result is a low annuity risk.

Underwriting risks are covered by various technical reserves:

- the mathematical reserves in Life insurance;
- the unearned premiums reserves for non-Life underwriting, generally calculated on an accruals basis, possibly supplemented by reserves for current risks;
- the reserves for increasing risk in certain cases (long-term policies with constant periodic premiums and increasing risk);
- the outstanding claims reserves, determined by reference to reported claims;
- the IBNR (claims incurred but not reported) reserves, determined on the basis of either observed settlements or the expected number of claims and the average cost per claim;
- the reserves for claims management, generally calculated *pro rata* to the claims reserves.

The level of prudence adopted for the overall assessment of claims incurred but not reported corresponds to the 90% quantile.

Appendix 1: Sovereign exposures

The BNP Paribas Group is exposed to sovereign risk, which is the risk of a State defaulting on its debt, *i.e.* a temporary or prolonged interruption of debt servicing (interest and/or principal). The Group is thus exposed to credit, counterparty or market risk according to the accounting category of the financial asset issued by the sovereign State.

Exposure to sovereign debt mainly consists of securities. The Group holds sovereign bonds as part of its liquidity management process. Liquidity management is based in particular on holding securities eligible as collateral for refinancing by central banks and includes a substantial share of highly rated debt securities issued by governments, representing a low level of risk. Moreover, as part of its assets and liability management and structural interest rate risk management policy, the Group also holds a portfolio of assets including sovereign debt instruments, with interest-rate characteristics that contribute to its hedging strategies. In addition, the Group is a primary dealer in sovereign debt securities in a number of countries, which leads it to take temporary long and short trading positions, some of which are hedged by derivatives.

Sovereign exposures held by the Group are presented in the table hereafter in accordance with the method defined by the EBA for the 2014 stress tests covering a scope which includes sovereigns as well as local and regional authorities.

BANKING AND TRADING BOOKS SOVEREIGN EXPOSURES BY GEOGRAPHICAL BREAKDOWN

Exposures *In millions of euros*	31 December 2019						
	Banking book[1]				Trading book		
						Derivatives[2]	
	Total	of which financial assets at amortised cost	of which financial instruments at fair value through equity	of which financial instruments at fair value through profit or loss	Financial instruments at fair value through profit or loss held for trading (excl. derivatives)	Direct exposures[3]	Indirect exposures[4]
Euro zone							
Austria	635	100	535	-	(12)	27	(1)
Belgium	12,953	9,928	2,903	122	100	343	(42)
France	10,308	7,647	2,662	-	(1,226)	(15)	162
Germany	7,286	4,949	2,078	259	2,897	403	7
Ireland	1,774	1,362	413	-	56	1	-
Italy	14,699	12,635	1,820	244	79	9,365	(69)
Netherlands	597	94	503	-	4	(349)	(1)
Portugal	3,704	3,143	561	-	(24)	(31)	(1)
Spain	10,923	9,057	1,766	101	26	-	(2)
Other euro zone countries	1,147	842	305	-	26	358	(1)
TOTAL EURO ZONE	**64,028**	**49,757**	**13,545**	**727**	**1,926**	**10,102**	**53**
Other European Economic Area countries							
Poland	6,698	4,688	2,010	-	133	(169)	-
United Kingdom	4,532	2,806	1,727	-	1,532	-	(62)
Other EEA countries	578	415	162	1	407	20	(2)
TOTAL OTHER EEA COUNTRIES	**11,809**	**7,909**	**3,899**	**1**	**2,072**	**(149)**	**(65)**
TOTAL EEA	**75,837**	**57,666**	**17,444**	**728**	**3,998**	**9,953**	**(12)**
United States	18,157	8,004	10,153	-	23,530	115	3
Japan	33	-	33	-	1,730	572	46
Turkey	1,850	1,025	826	-	582	-	(1)
Other	16,913	11,417	5,496	-	6,252	185	(125)
TOTAL	**112,790**	**78,111**	**33,951**	**728**	**36,093**	**10,825**	**(89)**

(1) *Book value after revaluation and before any impairment provision.*
(2) *Market value.*
(3) *Sovereign counterparty risk: direct exposure to a sovereign counterparty. This excludes exposure to a non-sovereign counterparty fully or partly covered by a sovereign counterparty.*
(4) *Positions held with a non-sovereign counterparty, exposing BNP Paribas to a credit risk on a sovereign third party. For example, sale of a CDS to a non-sovereign third party as a hedge against a sovereign's default. This excludes exposures to non-sovereign counterparties fully or partly covered by a sovereign government.*

Exposures *In millions of euros*	31 December 2018						
	Banking book(1)				Trading book		
						Derivatives(2)	
	Total	of which financial assets at amortised cost	of which financial instruments at fair value through equity	of which financial instruments at fair value through profit or loss	Financial instruments at fair value through profit or loss held for trading (excl. derivatives)	Direct exposures(3)	Indirect exposures(4)
Euro zone							
Austria	1,021	299	722	-	(45)	21	-
Belgium	9,803	4,876	4,804	123	205	274	66
France	9,364	4,208	5,156	-	(1,250)	(17)	(12)
Germany	6,547	4,185	2,103	259	1,962	255	(4)
Ireland	966	591	374	-	(2)	2	2
Italy	11,537	9,512	1,779	246	(128)	7,274	(26)
Netherlands	905	126	779	-	60	(551)	-
Portugal	1,008	838	169	-	(168)	(21)	1
Spain	4,200	2,820	1,279	101	(374)	-	(3)
Other euro zone countries	705	389	316	-	(18)	158	-
TOTAL EURO ZONE	**46,055**	**27,844**	**17,482**	**729**	**244**	**7,393**	**24**
Other European Economic Area countries							
Poland	6,887	3,066	3,819	3	336	(224)	1
United Kingdom	4,441	3,147	1,294	-	2,232	-	(66)
Other EEA countries	377	337	39	1	174	(24)	(3)
TOTAL OTHER EEA COUNTRIES	**11,705**	**6,550**	**5,151**	**4**	**2,742**	**(248)**	**(69)**
TOTAL EEA	**57,760**	**34,394**	**22,633**	**732**	**2,986**	**7,146**	**(45)**
United States	11,591	2,864	8,727	-	15,371	82	9
Japan	4	-	4	-	4,198	374	54
Turkey	1,066	524	542	-	571	1	12
Other	10,844	6,502	4,342	-	4,166	155	(43)
TOTAL	**81,265**	**44,284**	**36,248**	**732**	**27,292**	**7,758**	**(13)**

(1) Book value after revaluation and before any impairment provision.
(2) Market value.
(3) Sovereign counterparty risk: direct exposure to a sovereign counterparty. This excludes exposure to a non-sovereign counterparty fully or partly covered by a sovereign counterparty.
(4) Positions held with a non-sovereign counterparty, exposing BNP Paribas to a credit risk on a sovereign third party. For example, sale of a CDS to a non-sovereign third party as a hedge against a sovereign's default. This excludes exposures to non-sovereign counterparties fully or partly covered by a sovereign government.

Appendix 2: Regulatory capital – Detail

The table below is presented in the format required under Annex IV of Implementing Regulation (EU) No. 1423/2013 of 20 December 2013.

REGULATORY CAPITAL ACCORDING TO ANNEX IV OF IMPLEMENTING REGULATION (EU) NO. 1423/2013

			31 December 2018			
In millions of euros		31 December 2019	Phased-in	Transitional arrangements(*)	Reference to table 10	Notes
Common Equity Tier 1 (CET1) capital: instruments and reserves						
1	Capital instruments and the related share premium accounts	27,133	27,133	-	6	-
	of which ordinary shares	*27,133*	*27,133*	-	-	-
2	Retained earnings	62,139	58,968	-	-	-
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	2,139	503	-	-	-
3a	Funds for general banking risk	-	-	-	-	-
4	Amounts of qualifying items referred to in article 484 (3) and the related share premium accounts subject to phase out from CET1	-	-	-	-	-
	Public sector capital injections grandfathered until 1 January 2018	-	-	-	-	-
5	Minority interests (amount allowed in consolidated CET1)	1,742	1,781	-	8	(1)
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	3,888	3,387	-	7	(2)
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**97,041**	**91,772**	**-**	**-**	**-**
Common Equity Tier 1 (CET1) capital: regulatory adjustments						
7	Additional value adjustments (negative amount)	(1,396)	(892)	-	-	-
8	Intangible assets (net of related tax liability) (negative amount)	(11,380)	(12,162)	-	3	(3)
9	Empty set in the EU	-	-	-	-	-
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in article 38 (3) are met) (negative amount)	(430)	(527)	98	-	-
11	Fair value reserves related to gains or losses on cash flow hedges	(1,072)	(825)	-	-	-
12	Negative amounts resulting from the calculation of expected loss amounts	(551)	(242)	-	-	-
13	Any increase in equity that results from securitised assets (negative amount)	-	-	-	-	-
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	101	126	-	-	-
15	Defined-benefit pension fund assets (negative amount)	(243)	(224)	-	-	(3)
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	(47)	(140)	-	-	-

In millions of euros		31 December 2019	31 December 2018		Reference to table 10	Notes
			Phased-in	Transitional arrangements(*)		
17	Holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	-	-	-	-
18	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-	-
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-	-
20	Empty set in the EU	-	-	-	-	-
20a	Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative	(232)	(192)	-	-	-
20b	*of which: qualifying holdings outside the financial sector (negative amount)*	-	-	-	-	-
20c	*of which: securitisation positions (negative amount)*	*(232)*	*(192)*	-	-	-
20d	*of which: free deliveries (negative amount)*	-	-	-	-	-
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in article 38 (3) are met) (negative amount)	-	-	-	-	-
22	Amount exceeding the 17.65% threshold (negative amount)	-	-	-	-	-
23	*of which: direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities*	-	-	-	-	-
24	Empty set in the EU	-	-	-	-	-
25	*of which: deferred tax assets arising from temporary differences*	-	-	-	-	-
25a	Losses for the current financial year (negative amount)	-	-	-	-	-
25b	Foreseeable tax charges relating to CET1 items (negative amount)	-	-	-	-	-
26	Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment	(585)	(465)	-	-	-
26a	Regulatory adjustments relating to unrealised gains and losses pursuant to articles 467 and 468	-	-	-	-	-
	of which: ... unrealised gains (phase out)	-	-	-	-	-
	of which: ... unrealised losses (phase out)	-	-	-	-	-
	of which: unrealised gains linked to exposures to central administrations (phase out)	-	-	-	-	-
	of which: unrealised losses linked to exposures to central administrations (phase out)	-	-	-	-	-
26b	Amount to be deducted from or added to Common Equity Tier 1 capital with regard to additional filters and deductions required pre CRR	-	-	-	-	-
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)	-	-	-	-	-
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(15,837)**	**(15,542)**	**98**	**-**	**-**
29	**Common Equity Tier 1 (CET1) capital**	**81,204**	**76,230**	**98**	**-**	**-**

	In millions of euros	31 December 2019	31 December 2018		Reference to table 10	Notes
			Phased-in	Transitional arrangements[(*)]		
	Additional Tier 1 (AT1) capital: instruments					
30	Capital instruments and the related share premium accounts	6,940	5,429	-	-	-
31	*of which: classified as equity under applicable accounting standards*	*6,940*	*5,429*	-	-	-
32	*of which: classified as liabilities under applicable accounting standards*	-	-	-	-	-
33	Amount of qualifying items referred to in article 484 (4) and the related share premium accounts subject to phase out from AT1	1,749	2,801	41	-	-
	Public sector capital injections grandfathered until 1 January 2018	-	-	-	-	-
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	569	500	4	-	-
35	*of which: instruments issued by subsidiaries subject to phase out*	*278*	*278*	*4*	*4*	(4)
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**9,258**	**8,731**	**45**	**-**	**-**
	Additional Tier 1 (AT1) capital: regulatory adjustments					
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	(50)	(44)	-	-	-
38	Holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	-	-	-	-
39	Direct and indirect holdings by the institution of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-	-
40	Direct and indirect holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	(450)	-	-	-	-
41	Regulatory adjustments applied to Additional Tier 1 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No. 575/2013 (i.e. CRR residual amounts)	-	-	-	-	-
41a	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No. 575/2013	-	-	-	-	-
41b	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Tier 2 capital during the transitional period pursuant to article 475 of Regulation (EU) No. 575/2013	-	-	-	-	-
41c	Amount to be deducted from or added to Additional Tier 1 capital with regard to additional filters and deductions required pre-CRR	-	-	-	-	-
42	Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)	-	-	-	4	-
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**(500)**	**(44)**	**-**	**-**	**-**
44	**Additional Tier 1 (AT1) capital**	**8,758**	**8,687**	**45**	**-**	**-**
45	**Tier 1 capital (T1=CET1+AT1)**	**89,962**	**84,916**	**143**	**-**	**-**

In millions of euros		31 December 2019	31 December 2018		Reference to table 10	Notes
			Phased-in	Transitional arrangements(*)		
Tier 2 (T2) capital: instruments and provisions						
46	Capital instruments and the related share premium accounts	16,777	14,857	-	5	(5)
47	Amount of qualifying items referred to in article 484 (5) and the related share premium accounts subject to phase out from T2	50	50	(41)	5	(5)
	Public sector capital injections grandfathered until 1 January 2018	-	-	-	-	-
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 and 34) issued by subsidiaries and held by third parties	525	604	(4)	5	(5)
49	*of which: instruments issued by subsidiaries subject to phase out*	*197*	*81*	*(4)*	-	-
50	Credit risk adjustments	-	-	-	-	-
51	**Tier 2 (T2) capital before regulatory adjustments**	**17,351**	**15,511**	**(45)**	**-**	**-**
Tier 2 (T2) capital: regulatory adjustments						
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(142)	(138)	-	-	-
53	Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	-	-	-	-
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-	-
54a	*of which new holdings not subject to transitional arrangements*	-	-	-	-	-
54b	*of which holdings existing before 1 January 2013 and subject to transitional arrangements*	-	-	-	-	-
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	(3,456)	(3,317)	-	1	-
56	Regulatory adjustments applied to Tier 2 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No. 575/2013 (i.e. CRR residual amounts)	-	-	-	-	-
56a	Residual amounts deducted from Tier 2 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No. 575/2013	-	222	-	-	-
56b	Residual amounts deducted from Tier 2 capital with regard to deduction from Additional Tier 1 capital during the transitional period pursuant to article 475 of Regulation (EU) No. 575/2013	-	-	-	-	-
56c	Amount to be deducted from or added to Tier 2 capital with regard to additional filters and deductions required pre-CRR	-	-	-	-	-
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**(3,598)**	**(3,233)**	**-**	**-**	**-**
58	Tier 2 (T2) capital	13,753	12,278	(45)	-	-
59	Total capital (TC=T1+T2)	103,716	97,194	98	-	-

In millions of euros		31 December 2019	31 December 2018		Reference to table 10	Notes
			Phased-in	Transitional arrangements(*)		
59a	Risk-weighted assets in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No. 575/2013 (i.e. CRR residual amounts)	-	-	-	-	-
	of which: CET1 instruments of financial sector entities not deducted from CET1 (Regulation (EU) No. 575/2013 residual amounts)	-	-	-	-	-
	of which: Deferred tax assets that rely on future profitability and arising from temporary differences not deducted from CET1 (Regulation (EU) No. 575/2013 residual amounts)	-	-	-	-	-
	of which: AT1 instrument of financial sector entities not deducted from AT1 (Regulation (EU) No. 575/2013 residual amounts)	-	-	-	-	-
	of which: Tier 2 instrument of financial sector entities not deducted from Tier 2 (Regulation (EU) No. 575/2013 residual amounts)	-	-	-	-	-
60	**Total risk-weighted assets**	**668,828**	**647,001**	**-**		
Capital ratios and buffers						
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	12.1%	11.8%	0.0%	-	-
62	Tier 1 (as a percentage of risk exposure amount)	13.5%	13.1%	0.0%	-	-
63	Total capital (as a percentage of risk exposure amount)	15.5%	15.0%	0.0%	-	-
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	4.17%	3.445%	0.625%	-	-
65	*of which: capital conservation buffer requirement*	*2.50%*	*1.875%*	*0.625%*	-	-
66	*of which: countercyclical buffer requirement*	*0.17%*	*0.07%*	*0.00%*	-	-
67	*of which: systemic risk buffer requirement*	*0.00%*	*0.00%*	*0.00%*	-	-
67a	*of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer*	*1.50%*	*1.50%*	*0.00%*	-	-
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	7.6%	7.3%		-	-
69	[non relevant in EU regulation]					
70	[non relevant in EU regulation]					
71	[non relevant in EU regulation]					
Amounts below the thresholds for deduction (before risk weighting)						
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	4,402	2,564	-	2	(6)
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	3,130	3,353	-	1	(6)
74	Empty set in the EU	-	-	-		

In millions of euros		31 December 2019	31 December 2018		Reference to table 10	Notes
			Phased-in	Transitional arrangements(*)		
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in article 38 (3) are met)	3,382	3,265	-	-	-
Applicable caps on the inclusion of provisions in Tier 2						
76	Credit risk adjustments included in Tier 2 in respect of exposures subject to standardised approach (prior to the application of the cap)	-	-	-	-	-
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	2,858	2,983	-	-	-
78	Credit risk adjustments included in Tier 2 in respect of exposures subject to internal ratings based approach (prior to the application of the cap)	-	222	-	-	-
79	Cap on inclusion of credit risk adjustments in T2 under internal ratings based approach	1,670	1,546	-	-	-
Capital instruments subject to phase out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)						
80	Current cap on CET1 instruments subject to phase out arrangements	-	-	-	-	-
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-	-	-	-	-
82	Current cap on AT1 instruments subject to phase out arrangements	3,035	4,046	1,012	-	-
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	-	-	-	-
84	Current cap on T2 instruments subject to phase out arrangements	556	742	185	-	-
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	-	-	-	-

(*) Amounts subject to pre-regulation treatment or prescribed residual amount of Regulation (EU) No. 575/2013, in accordance with grandfathered Additional Tier 1 and Tier 2 eligibility rules applicable as of 2019.
(1) Minority interests are adjusted for their capitalisation surplus for regulated entities. For the other entities, minority interests are not recognised.
(2) Deductions from net income for the period relate mainly to the proposed dividend distribution.
(3) The deduction of intangible assets is calculated net of deferred tax liabilities.
(4) Tier 1 capital instruments issued by subsidiaries include subordinated debt, as well as preferred shares recognised in equity.
(5) A prudential discount is applied to Tier 2 capital instruments with less than five years of residual maturity.
(6) Holdings of equity instruments in financial institutions are recorded in the banking book, as detailed in the consolidated accounting balance sheet to the prudential balance sheet reconciliation, as well as in the trading book.

Appendix 3: Countercyclical capital buffer

The calculation and the amount of the BNP Paribas' countercyclical capital buffer are given in the tables below, according to the instructions of the Commission Delegated Regulation (EU) No. 2015/1555 of 28 May 2015.

➤ AMOUNT OF INSTITUTION-SPECIFIC COUNTERCYCLICAL CAPITAL BUFFER

	In millions of euros	31 December 2019
010	Total risk-weighted assets	668,828
020	BNP Paribas countercyclical capital buffer rate	0.17%
030	Countercyclical capital buffer requirement	1,115

At 31 December 2019, the BNP Paribas' countercyclical capital buffer rate is 0.17%.

The countercyclical capital buffer is calculated as the weighted average of the countercyclical buffer rates that apply in the countries where the relevant credit exposures of the Group are located. The weight applied to the countercyclical buffer rate in each country is the share of own funds requirements in total own funds requirements relating to relevant credit exposures in the territory in question.

At 30 June 2020, as a result of the increase to 0.50% of the interest rate applicable in France (+8 basis points), the Group's countercyclical capital buffer rate could increase to 0.25%. This rate could reach 0.35% at 31 December 2020, due mainly to the interest rate increase applicable in the United Kingdom (+4 basis points) and the activations of interest rates in Belgium (+4 basis points) and Germany (+1 basis point). Finally, the interest rate increase applicable in Luxembourg (+1 basis point) could raise this rate to 0.36% on 1 January 2021.

➤ GEOGRAPHICAL DISTRIBUTION OF CREDIT EXPOSURES RELEVANT FOR THE CALCULATION OF THE COUNTERCYCLICAL CAPITAL BUFFER

											31 December 2020
										31 December 2019	
	General credit exposures		Securitisation exposures		Own funds requirements						
	Exposure value for standardised approach	Exposure value for IRB	Exposure value for standardised approach	Exposure value for IRB	of which: General credit exposures	of which: Trading book exposures	of which: Securitisation exposures	Total	Own funds requirement weights	Countercyclical capital buffer rate	Announced countercyclical capital buffer rate(**)
In millions of euros	010	020	050	060	070	080	090	100	110	120	
010 Breakdown by country											
Europe(*)	**184,738**	**614,261**	**3,882**	**43,646**	**31,151**	**1,398**	**631**	**33,180**	**0.75**		
of which Germany	20,260	14,894	275	2,042	1,626	-	43	1,669	0.04		0.25%
of which Belgium	12,721	127,576	-	4,218	4,108	-	65	4,173	0.09		0.50%
of which Bulgaria	392	313	-	-	42	-	-	42	0.00	0.50%	1.00%
of which Denmark	1,472	1,901	-	-	157	-	-	157	0.00	1.00%	2.00%
of which France	48,006	245,175	354	25,825	11,766	1,381	291	13,439	0.30	0.25%	0.50%
of which Ireland	271	7,709	7	749	254	-	19	273	0.01	1.00%	1.00%
of which Iceland	1	12	-	-	0	-	-	0	0.00	1.75%	2.00%
of which Lithuania	8	5	-	-	1	-	-	1	0.00	1.00%	1.00%
of which Luxembourg	1,531	33,424	-	-	1,193	0	-	1,194	0.03		0.25%
of which Norway	614	2,594	-	-	119	-	-	119	0.00	2.50%	2.50%
of which Czech Republic	298	937	-	-	57	-	-	57	0.00	1.50%	2.00%
of which United Kingdom	14,447	39,825	1,380	6,251	1,836	-	132	1,967	0.04	1.00%	2.00%
of which Slovakia	165	243	-	-	18	-	-	18	0.00	1.50%	2.00%
of which Sweden	2,275	1,941	96	18	217	-	3	220	0.00	2.50%	2.50%
North America	**63,825**	**76,187**	**2,584**	**10,406**	**5,716**	**21**	**199**	**5,935**	**0.13**		
Asia Pacific	**5,478**	**44,514**	**29**	**957**	**2,301**	**-**	**11**	**2,312**	**0.05**		
of which Hong Kong	1,528	6,931	-	45	330	-	1	331	0.01	2.00%	2.00%
Rest of the World	**29,209**	**32,484**	**-**	**-**	**3,023**	**8**	**-**	**3,031**	**0.07**		
020 TOTAL	**283,251**	**767,446**	**6,495**	**55,009**	**42,190**	**1,427**	**841**	**44,457**	**1.00**	**0.17%**	**0.35%**

(*) Within the European Union and the European Free Trade Association (EFTA).
(**) According to the rates published on the ESRB website as at 31 December 2019.

Appendix 4: Capital requirements of significant subsidiaries

The following tables give the capital requirements of significant subsidiaries (see paragraph *Significant subsidiaries* in section 5.2 *Scope of application*) by type of risk, as contribution to the Group's total capital requirement.

BNP PARIBAS FORTIS GROUP

		RWAs		Capital requirements
	In millions of euros	31 December 2019	31 December 2018	31 December 2019
1	**Credit risk**	**129,205**	**134,105**	**10,336**
2	Of which standardised approach	53,815	66,769	4,305
4	Of which advanced IRB approach	60,420	57,604	4,834
5	Of which equity positions under the simple risk-weighted approach	14,971	9,732	1,198
6	**Counterparty credit risk**	**2,004**	**1,877**	**160**
7	Of which mark-to-market	446	345	36
10	Of which internal model method (IMM)	1,378	1,317	110
11	Of which CCP - default fund contributions	84	58	7
12	Of which CVA	97	157	8
14	**Securitisation exposures in the banking book**	**1,013**	**823**	**81**
14a	Of which internal ratings based approach (SEC-IRBA)	816	-	65
14c	Of which external ratings based approach (SEC-ERBA)	26	-	2
15	Of which IRB approach (IRB)	171	402	14
18	Of which standardised approach	0	421	0
19	**Market risk**	**533**	**404**	**43**
20	Of which standardised approach	533	404	43
23	**Operational risk**	**13,198**	**15,260**	**1,056**
24	Of which basic indicator approach	1,941	2,768	155
25	Of which standardised approach	2,160	2,632	173
26	Of which Advanced Measurement Approach (AMA)	9,097	9,860	728
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**4,370**	**4,355**	**350**
29	**TOTAL**	**150,323**	**156,825**	**12,026**

BNL GROUP

In millions of euros		RWAs 31 December 2019	RWAs 31 December 2018	Capital requirements 31 December 2019
1	**Credit risk**	**38,373**	**35,861**	**3,070**
2	Of which standardised approach	6,864	6,504	549
4	Of which advanced IRB approach	29,861	27,776	2,389
5	Of which equity positions under the simple risk-weighted approach	1,649	1,581	132
6	**Counterparty credit risk**	**397**	**386**	**32**
7	Of which mark-to-market	298	275	24
12	Of which CVA	99	111	8
14	**Securitisation exposures in the banking book**	**461**	**210**	**37**
14a	Of which internal ratings based approach (SEC-IRBA)	39	-	3
14b	Of which standardised approach (SEC-SA)	222	-	18
15	Of which IRB approach (IRB)	5	-	0
16	Of which IRB supervisory formula approach (SFA)	156	155	12
18	Of which standardised approach	39	55	3
19	**Market risk**	**2**	**12**	**0**
20	Of which standardised approach	2	12	0
23	**Operational risk**	**3,798**	**5,419**	**304**
24	Of which basic indicator approach	142	79	11
25	Of which standardised approach	136	101	11
26	Of which Advanced Measurement Approach (AMA)	3,520	5,239	282
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**79**	**26**	**6**
29	**TOTAL**	**43,110**	**41,915**	**3,449**

BNP PARIBAS USA INC. GROUP

		RWAs		Capital requirements
In millions of euros		31 December 2019	31 December 2018	31 December 2019
1	**Credit risk**	**46,798**	**45,315**	**3,744**
2	Of which standardised approach	45,888	44,620	3,671
4	Of which advanced IRB approach	365	276	29
5	Of which equity positions under the simple risk-weighted approach	545	418	44
6	**Counterparty credit risk**	**1,034**	**886**	**83**
7	Of which mark-to-market	659	543	53
10	Of which internal model method (IMM)	192	248	15
11	Of which CCP - default fund contributions	174	87	14
12	Of which CVA	9	9	1
14	**Securitisation exposures in the banking book**	**9**	**5**	**1**
14b	Of which standardised approach (SEC-SA)	0	-	0
14c	Of which external ratings based approach (SEC-ERBA)	6	-	0
18	Of which standardised approach	3	5	0
19	**Market risk**	**0**	**19**	**0**
20	Of which standardised approach	0	19	0
23	**Operational risk**	**4,540**	**4,601**	**363**
24	Of which basic indicator approach	41	39	3
25	Of which standardised approach	3,511	3,512	281
26	Of which Advanced Measurement Approach (AMA)	988	1,050	79
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**726**	**1,920**	**58**
29	**TOTAL**	**53,107**	**52,745**	**4,249**

BANK OF THE WEST GROUP

In millions of euros		RWAs		Capital requirements
		31 December 2019	31 December 2018	31 December 2019
1	**Credit risk**	**45,837**	**44,489**	**3,677**
2	Of which standardised approach	45,714	44,457	3,667
5	Of which equity positions under the simple risk-weighted approach	124	32	10
6	**Counterparty credit risk**	**328**	**179**	**26**
7	Of which mark-to-market	319	170	26
12	Of which CVA	9	9	1
14	**Securitisation exposures in the banking book**	**9**	**5**	**1**
14c	Of which external ratings based approach (SEC-ERBA)	6	-	0
18	Of which standardised approach	3	5	0
19	**Market risk**	**0**	**1**	**0**
20	Of which standardised approach	0	1	0
23	**Operational risk**	**3,511**	**3,396**	**281**
24	Of which basic indicator approach	0	2	0
25	Of which standardised approach	3,511	3,394	281
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**85**	**1,311**	**7**
29	**TOTAL**	**49,771**	**49,382**	**3,992**

BNP PARIBAS PERSONAL FINANCE GROUP

In millions of euros		RWAs		Capital requirements
		31 December 2019	31 December 2018	31 December 2019
1	**Credit risk**	**58,781**	**58,533**	**4,702**
2	Of which standardised approach	45,842	45,567	3,667
4	Of which advanced IRB approach	12,837	12,904	1,027
5	Of which equity positions under the simple risk-weighted approach	101	62	8
6	**Counterparty credit risk**	**8**	**16**	**1**
7	Of which mark-to-market	1	2	0
12	Of which CVA	7	14	1
14	**Securitisation exposures in the banking book**	**232**	**150**	**19**
14a	Of which internal ratings based approach (SEC-IRBA)	66	-	5
14b	Of which standardised approach (SEC-SA)	7	-	1
14c	Of which external ratings based approach (SEC-ERBA)	58	-	5
15	Of which IRB approach	82	110	7
16	Of which IRB supervisory formula approach (SFA)	0	0	0
18	Of which standardised approach	19	41	1
19	**Market risk**	**4**	**8**	**0**
20	Of which standardised approach	4	8	0
23	**Operational risk**	**6,727**	**6,397**	**538**
24	Of which basic indicator approach	904	1,302	72
25	Of which standardised approach	1,160	869	93
26	Of which Advanced Measurement Approach (AMA)	4,663	4,226	373
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**1,788**	**1,846**	**143**
29	**TOTAL**	**67,540**	**66,950**	**5,403**

BGL BNP PARIBAS GROUP

In millions of euros		RWAs		Capital requirements
		31 December 2019	31 December 2018	31 December 2019
1	**Credit risk**	**22,849**	**22,588**	**1,828**
2	Of which standardised approach	16,433	16,183	1,315
4	Of which advanced IRB approach	5,897	5,956	472
5	Of which equity positions under the simple risk-weighted approach	519	449	42
6	**Counterparty credit risk**	**39**	**37**	**3**
7	Of which mark-to-market	37	35	3
12	Of which CVA	2	2	0
14	**Securitisation exposures in the banking book**	**12**	**28**	**1**
15	Of which IRB approach (IRB)	12	28	1
18	Of which standardised approach	0	0	0
19	**Market risk**	**13**	**9**	**1**
20	Of which standardised approach	13	9	1
23	**Operational risk**	**2,061**	**1,943**	**165**
24	Of which basic indicator approach	156	112	12
25	Of which standardised approach	254	240	20
26	Of which Advanced Measurement Approach (AMA)	1,652	1,591	132
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**172**	**178**	**14**
29	**TOTAL**	**25,146**	**24,784**	**2,012**

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Appendix 6: Acronyms

Acronyms	
ABCP	Asset-Backed Commercial Paper
ABS	Asset-Backed Securities
ACPR	*Autorité de contrôle prudentiel et de résolution*
ALCo	Asset and Liability Committee
ALM	Asset and Liability Management
AMA	Advanced Measurement Approach
bp	Basis points
BNB	Banque Nationale de Belgique
BRRD	Bank Recovery and Resolution Directive
CCP	Central Counterparty
CCF	Credit Conversion Factor
CDO	Collaterised Debt Obligations
CDS	Credit Default Swap
CEBS	Committee of European Banking Supervisors
CLO	Collaterised Loan Obligations
CMBS	Commercial Mortgage Backed Securities
CMG	Crisis Management Group
CRD	Capital Requirement Directive
CRM	Comprehensive Risk Measure
CRR	Capital Requirement Regulation
CVA	Credit Valuation Adjustment
D-SIBs	Domestic Systemically Important Banks
EAD	Exposure at Default
EBA	European Banking Authority
ECB	European Central Bank
EDTF	Enhanced Disclosure Task Force
EEA	European Economic Area
EEPE	Effective Expected Positive Exposure
EHQLA	Extremely High Credit Quality Liquid Assets
EL	Expected Loss
FBF	*Fédération Bancaire Française*
FED	Federal Reserve System of the United States
FICC	Fixed Income Currency and Commodities

Acronyms	
FSB	Financial Stability Board
G-SIBs	Global Systemically Important Banks
GDP	Gross Domestic Product
GRR	Global Recovery Rate
HCSF	*Haut Conseil de Stabilité Financière*
HQLA	High Quality Liquid Assets
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IRBA	Internal Ratings Based Approach
IRC	Incremental Risk Charge
ISDA	International Swaps and Derivatives Association
KYC	Know Your Customer
LGD	Loss Given Default
LTV	Loan-to-Value
MTN	Medium Term Note
MREL	Minimum Requirement for own funds and Eligible Liabilities
NBI	Net Banking Income
NPV	Net Present Value
P&C	Property & Casualty
PD	Probability of Default
PVA	Prudent Valuation Adjustment
RMBS	Residential Mortgage-Backed Securities
RW	Risk Weight
SFT	Securities Financing Transactions
SME	Small and Medium Enterprises
SREP	Supervisory REview Process
TLAC	Total Loss Absorbing Capacity
TLTRO	Targeted Long Term Refinancing Operation
VaR	Value at Risk

6 INFORMATION ON THE PARENT COMPANY FINANCIAL STATEMENTS AT 31 DECEMBER 2019

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6.1 BNP Paribas SA financial statements

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2019

In millions of euros	Notes	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Interest income	2.a	22,446	19,702
Interest expense	2.a	(18,506)	(15,338)
Income on equities and other variable instruments	2.b	6,223	4,520
Commission income	2.c	6,153	5,541
Commission expense	2.c	(1,304)	(1,059)
Net gains on trading account securities	2.d	4,600	3,282
Net gains on securities available for sale	2.e	583	169
Other banking income		97	152
Other banking expenses		(121)	(159)
NET BANKING INCOME		**20,171**	**16,810**
Salaries and employee benefit expenses	5.a	(6,700)	(6,116)
Other administrative expenses		(4,774)	(4,872)
Depreciation, amortisation and impairment on tangible, and intangible assets		(693)	(608)
GROSS OPERATING INCOME		**8,004**	**5,214**
Cost of risk	2.f	(759)	(332)
OPERATING INCOME		**7,245**	**4,882**
Net gains or losses on disposals of long-term investments	2.g	575	(408)
Net additions to regulated provisions		(5)	(4)
INCOME BEFORE TAX		**7,815**	**4,470**
Income tax	2.h	(325)	557
NET INCOME		**7,490**	**5,027**

BALANCE SHEET AT 31 DECEMBER 2019

In millions of euros at	Notes	31 December 2019	31 December 2018
ASSETS			
Cash and amounts due from central banks		132,027	165,621
Treasury bills and money-market instruments	3.c	198,628	152,521
Due from credit institutions	3.a	230,161	228,514
Customer items	3.b	495,934	450,162
Bonds and other fixed-income securities	3.c	73,764	91,306
Equities and other variable-income securities	3.c	2,695	1,614
Investments in subsidiaries and equity securities held for long-term investment	3.c	3,499	3,501
Investments in affiliates	3.c	62,016	63,284
Intangible assets	3.j	2,762	2,665
Tangible assets	3.j	2,539	2,504
Treasury shares	3.d	38	38
Other assets	3.h	129,464	134,416
Accrued income	3.i	95,819	71,232
TOTAL ASSETS		**1,429,346**	**1,367,378**
LIABILITIES			
Due to central banks		4,422	1,207
Due to credit institutions	3.a	270,139	249,147
Customer items	3.b	587,144	567,227
Debt securities	3.f	135,004	133,959
Other liabilities	3.h	247,088	252,866
Accrued income	3.i	84,779	68,304
Provisions	3.k	1,723	1,681
Subordinated debt	3.l	26,212	23,864
TOTAL LIABILITIES		**1,356,511**	**1,298,255**
Shareholders' equity	6.b		
Share capital		2,500	2,500
Additional paid-in capital		23,222	23,222
Reserves and Retained earnings		39,623	38,374
Net income for the period		7,490	5,027
TOTAL SHAREHOLDERS' EQUITY		**72,835**	**69,123**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**1,429,346**	**1,367,378**

OFF-BALANCE SHEET	Notes	31 December 2019	31 December 2018
COMMITMENTS GIVEN			
Loan commitment	4.a	330,760	305,735
Guarantee commitments	4.b	128,042	116,498
Commitments given on securities		23,433	15,774
COMMITMENTS RECEIVED			
Loan commitment	4.a	148,432	146,152
Guarantee commitments	4.b	245,056	212,576
Commitments received on securities		35,672	27,677

Notes to the parent company financial statements

Note 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES APPLIED BY BNP PARIBAS SA

BNP Paribas SA's financial statements have been prepared in accordance with generally accepted accounting principles applied to credit institutions in France, set out in ANC (French Accounting Standards Authority) regulation 2014-07 of 26 November 2014 and its amending regulations since that date.

AMOUNTS DUE FROM CREDIT INSTITUTIONS AND CUSTOMERS

Amounts due from credit institutions include all subordinated and unsubordinated loans made in connection with banking transactions with credit institutions, with the exception of debt securities. They also include assets purchased under resale agreements, whatever the type of assets concerned, and receivables corresponding to securities sold under collateralised repurchase agreements. They are broken down between demand loans and deposits, and term loans and time deposits.

Amounts due from customers include loans to customers other than credit institutions, with the exception of loans represented by debt securities issued by customers, assets purchased under resale agreements, whatever the type of assets concerned, and receivables corresponding to securities sold under collateralised repurchase agreements. They are broken down between commercial loans, customer debit accounts, and other loans.

Amounts due from credit institutions and customers are recorded in the balance sheet at nominal value plus accrued interest not yet due.

Outstanding loans and confirmed credit facilities are broken down into sound loans, including sound restructured loans, and doubtful loans. The same analysis is performed for credit risks attached to forward financial instruments whose present value represents an asset for the Group.

Credit risks are monitored using BNP Paribas SA's internal credit risk rating system. This system is based on two key parameters: the probability of default by the counterparty, expressed as a rating, and the overall recovery rate determined by reference to the type of transaction. There are twelve counterparty ratings: ten covering sound loans and two covering doubtful loans and loans classified as irrecoverable.

Doubtful loans are defined as loans where the Bank considers that there is a risk that the borrowers will be unable to honour all or part of their commitments. Loans on which one or more instalments are more than three months overdue as well as loans for which legal procedures have been initiated are considered doubtful. When a loan is classified as doubtful, all other loans and commitments to the debtor are automatically assigned the same classification.

The Bank recognises an impairment for doubtful accounts on these loans, in an amount corresponding to the difference between the total loan value and current value of the future cash flows (from principal, interest, and any realised guarantees) that are deemed recoverable, using a discount rate equal to the original effective interest rate (for fixed-rate loans), or the most recent contractual interest rate (for floating-rate loans). The guarantees considered here include mortgages and pledges on assets, as well as credit derivatives acquired by the Bank as a protection against credit losses in the loan book.

If a loan is restructured because the borrower is facing financial difficulties, the Bank calculates a discount equal to the difference in present value between the old and new repayment terms. These discounts are recognised as a deduction to assets and reversed through income on an actuarial basis over the remaining term of the loan. If any instalments on a restructured loan are not paid, the loan is reclassified as irrecoverable regardless of the terms of the restructuring.

In the case of doubtful loans where the borrower has resumed making regular payments in accordance with the original repayment schedule, the loan is reclassified as sound. Similarly, doubtful loans that have been restructured are also reclassified as sound, provided that the restructuring terms are satisfied.

Irrecoverable loans include loans to borrowers whose credit standing is such that after a reasonable time classified as doubtful loans, no reclassification as a sound loan is foreseeable, loans where an event of default has occurred, almost all restructured loans where the borrower has once again defaulted, and loans classified as doubtful for more than one year that are in default and are not secured by guarantees covering a substantial portion of the amount due.

Impairments for credit risks on assets are deducted from the carrying amount of the assets. Provisions recorded under liabilities include provisions related to off-balance sheet commitments, loss provisions relating to interests in real-estate development programmes, provisions for claims and litigation, and provisions for unforeseeable industry risks.

Additions to and recoveries of provisions and impairment, losses on irrecoverable loans, recoveries on loans covered by provisions and discounts calculated on restructured loans are recorded in the profit and loss account under "Cost of risk".

The interest received from the repayment of the carrying amount of loans that have been written-down, as well as the reversals of discounting effects and the discount on restructured loans, are recognised under "Interest income".

REGULATED SAVINGS AND LOAN CONTRACTS

Home savings accounts (*Comptes Épargne Logement*, or CELs) and home savings plans (*Plans d'Épargne Logement*, or PELs) are government regulated retail products sold in France. They combine an inseparable savings phase and a loan phase with the loan phase contingent upon the savings phase.

These products contain two types of obligations for BNP Paribas SA: an obligation to pay interest on the savings for an indefinite period at a rate set by the government on inception of the contract (in the case of PEL products) or at a rate reset every semester using an indexation formula set by law (in the case of CEL products); and an obligation to lend to the customer (at the customer's option) an amount contingent upon the rights acquired during the savings phase at a rate set on inception of the contract (in the case of PEL products) or at a rate contingent upon the savings phase (in the case of CEL products).

BNP Paribas SA's future obligations with respect to each generation (in the case of PEL products, a generation comprises all products with the same interest rate at inception; in the case of CEL products, all such products constitute a single generation) are measured by discounting potential future earnings from at-risk outstandings for that generation.

At-risk outstandings are estimated on the basis of a historical analysis of customer behaviour, and equate to statistically probable outstanding loans and the difference between statistically probable outstandings and minimum expected outstandings, with minimum expected outstandings being deemed equivalent to unconditional term deposits.

Earnings for future periods from the savings phase are estimated as the difference between the reinvestment rate and the fixed savings interest rate on at-risk savings outstanding for the period in question. Earnings for future periods from the loan phase are estimated as the difference between the refinancing rate and the fixed loan interest rate on at-risk outstanding loans for the period in question.

The reinvestment rate for savings and the refinancing rate for loans are derived from the swap yield curve and from the spreads expected on financial instruments of similar type and maturity. Spreads are determined on the basis of actual spreads on fixed rate home loans in the case of the loan phase and on products offered to retail clients in the case of the savings phase.

In order to reflect the uncertainty of future interest-rate trends, and the impact of such trends on customer behaviour models and on at risk outstandings, the obligations are estimated using the Monte-Carlo method.

When the sum of BNP Paribas SA's estimated future obligations with respect to the savings and loan phases of any generation of contracts indicates a potentially unfavourable situation for BNP Paribas SA, a provision is recognised, with no offset between generations, in the balance sheet under "Provisions". Movements in this provision are recognised as interest income in the profit and loss account.

SECURITIES

The term "Securities" covers interbank market securities, Treasury bills and negotiable certificates of deposit, bonds and other "fixed-income" securities (whether fixed- or floating-rate) and equities and other variable-income securities.

Securities are classified as: "Trading account securities", "Securities available for sale", "Equity securities available for sale in the medium term", "Debt securities held to maturity", "Equity securities held for long-term investment", or "Investments in subsidiaries and affiliates".

As of 1 January 2018, trading securities acquired or disposed of under agreements whose terms require delivery of the securities within a period defined by regulation or by an agreement on the relevant market are recorded in the balance sheet on the settlement date. This change has no impact on the profit and loss account and on capital at the start of the year. Other categories of securities acquired or disposed of under the same conditions are still recorded on the transaction date.

When a credit risk has occurred, fixed-income securities held in the "Available for sale" or "Held to maturity" portfolio are classified as doubtful, based on the same criteria as those applied to doubtful loans and commitments.

When securities exposed to counterparty risk are classified as doubtful and the related provision can be separately identified, the corresponding charge is included in "Cost of risk".

Trading account securities

"Trading account securities" are securities bought or sold with the intention of selling them or repurchasing them in the near future, as well as those held as a result of market-making activities. These securities are valued individually at market value if they meet the following criteria:

- they can be traded on an active market (i.e. a market where third parties have continuous access to market prices through a securities exchange, brokers, traders, or market-makers);
- the market prices reflect actual, regularly-occurring transactions taking place under normal competition conditions.

"Trading account securities" also include securities bought or sold for specific asset-management objectives (especially in terms of sensitivity) for trading books comprised of forward financial instruments, securities, or other financial instruments taken globally.

Changes in the market value of these securities are recognised in income. "Trading account securities" cannot be reclassified into another category and must follow the valuation rules for this category until they are sold, fully redeemed, or recognised as a loss and consequently removed from the balance sheet.

In the case of exceptional circumstances necessitating a change in investment strategy, "Trading account securities" can be reclassified as "Securities available for sale" or "Debt securities held to maturity" depending on the new strategy.

If fixed-income securities classified as "Trading account securities" can no longer be traded on an active market, and if the Bank has the intention and ability to hold these securities for the foreseeable future or until maturity, they can be reclassified as "Securities available for sale" or "Debt securities held to maturity".

The accounting rules for the new category would apply to reclassified securities as of the reclassification date.

If the market in which securities classified as "Trading account securities" were purchased can no longer be considered active, the securities will be valued using methods that take into account the new market conditions.

Securities available for sale

The "Securities available for sale" category includes securities not classified into one of the other categories.

Bonds and other fixed-income securities are valued at the lower of cost (excluding accrued interest) or probable market prices. This is generally determined on the basis of stock market prices. Accrued interest is posted to the profit and loss account under "Interest income on bonds and other fixed-income securities".

For fixed-income securities available for sale that have been purchased on the secondary market, any difference between cost and redemption price is recognised in income using the actuarial method over the remaining life of the securities. On the balance sheet, their carrying amount is amortised to their redemption value over their remaining life.

Equities are valued at the lower of cost or probable market prices. This is generally determined on the basis of stock market prices for listed equities, or BNP Paribas SA's share in net equity, calculated on the basis of the most recent financial statements available, for unlisted equities. Dividends received are recognised in income under "Income on equities and other variable income instruments" on a cash basis.

The cost of securities available for sale that have been sold is determined on a first in, first out (FIFO) basis. Disposal gains or losses, and additions to and reversals of lower of cost and market provisions are reflected in the profit and loss account under "Gains (losses) on securities available for sale".

In the case of exceptional circumstances necessitating a change in investment strategy, or if the securities can no longer be traded on an active market, securities classified as "Securities available for sale" may be reclassified as "Debt securities held to maturity" and must be identified within this portfolio. These securities would then be recognised according to the method used for "Debt securities held to maturity".

Equity securities available for sale in the medium term

Equity securities available for sale in the medium term comprise investments made for portfolio management purposes, with the aim of realising a profit in the medium term without investing on a long-term basis in the development of the issuer's business. This category includes venture capital investments.

Equity securities available for sale in the medium term are recorded individually at the lower of historic cost and fair value. Fair value takes into account the issuer's general business outlook and the planned holding period. The fair value of listed shares is determined by reference to the average stock market price determined over a one-month period.

Debt securities held to maturity

Fixed-income securities with a specified maturity (mainly bonds, interbank market securities, Treasury bills, and other negotiable debt securities) are recorded under "Debt securities held to maturity" to reflect BNP Paribas SA's intention of holding them to maturity.

Bonds classified under this heading are financed by matching funds or hedged against interest-rate exposure for their remaining lives.

The difference between cost and the redemption price of these securities is recognised in income using the actuarial method over the remain life of the securities. On the balance sheet, their carrying amount is amortised to their redemption value over their remaining life.

Interest on debt securities held to maturity is recorded in the profit and loss account under "Interest income on bonds and other fixed-income securities".

An impairment is recognised when a decline in the credit standing of an issuer jeopardises redemption at maturity.

If a significant portion of the "Debt securities held to maturity" is sold or reclassified into a different category, the sold or reclassified securities cannot be returned to the "Debt securities held to maturity" category at any time during the current financial period or the following two financial years. All the securities classified as "Debt securities held to maturity" would then be reclassified as "Securities available for sale in the medium term".

If exceptional market circumstances necessitate a change in investment strategy, and "Trading account securities" and "Securities available for sale" are reclassified as "Debt securities held to maturity", the sale of any "Debt securities held to maturity" prior to the maturity date would not invoke the reclassification clauses in the above paragraph if the sale occurred because the securities had once again become tradable on an active market.

Equity securities held for long-term investment, investments in subsidiaries and affiliates

Equity interests include investments in subsidiaries and affiliates in which BNP Paribas SA exercises significant influence over management and investments considered strategic to BNP Paribas SA's business development. This influence is deemed to exist when BNP Paribas SA holds an ownership interest of at least 10%.

Equity securities held for long-term investment are shares and related instruments that BNP Paribas SA intends to hold on a long-term basis in order to earn a satisfactory long-term rate of return without taking an active part in the management of the issuing company, but with the intention of promoting the development of lasting business relationships by creating special ties with the issuer.

Other investments in affiliates consist of shares and other variable-income investments in companies over which BNP Paribas SA has exclusive control (i.e. companies likely to be fully consolidated into the Group).

These types of securities are recorded individually at the lower of cost and fair value.

Fair value for each security is determined on the basis of available information, including discounted future cash flows, net revalued assets and/or multiples commonly used to assess future yields. For securities listed on an active market, the fair value is considered to be the average stock price over the previous one-month period.

For simplicity, listed securities acquired for less than EUR 10 million may be valued on the basis of the average closing stock market price in the month prior to closing.

Disposals, gains and losses and provision movements are recorded in the profit and loss account under "Net gain (loss) on disposals of fixed assets".

Dividends are recognised as soon as payment has been approved by the Annual General Meeting or when they are received if the shareholders' decision is unknown. They are recorded under "Income on equities and other variable instruments."

Treasury shares

Treasury shares held by BNP Paribas SA are classified and valued as follows:

- Treasury shares held, purchased under a market-making agreement or acquired in connection with index arbitrage transactions are recorded under "Trading account securities" at market price;
- Treasury shares held for allocation to employees are recorded under "Securities available for sale" Shares granted to employees of BNP Paribas SA subsidiaries are charged to the subsidiaries according to the provisions of local law;
- Treasury shares held to be granted to employees are not impaired, but a provision is recognised for these shares based on the services provided by the employees who will receive the shares;
- Treasury shares that are intended to be cancelled or that are not being held for either of the above reasons are included in long-term investments. Treasury shares intended to be cancelled are stated at cost. All others are stated at the lower of cost and fair value.

FIXED ASSETS

Buildings and equipment are stated at acquisition cost or at the adjusted value determined in accordance with France's finance laws of 1977 and 1978. Revaluation differences on non-depreciable assets, recorded at the time of these statutory revaluations, are included in share capital.

Fixed assets are initially recognised at purchase price plus directly attributable costs, together with borrowing costs where a long period of construction or adaptation is required before the asset can be brought into service.

Software developed internally by BNP Paribas SA that fulfils the criteria for capitalisation is capitalised at direct development cost, which includes external costs and staff costs directly attributable to the project.

Subsequent to initial recognition, fixed assets are measured at cost less accumulated depreciation or amortisation and any impairment losses.

Fixed assets are depreciated or amortised using the straight-line method over the useful life of the asset. Depreciation and amortisation expense is recognised in the profit and loss account under "Depreciation, amortisation, and provisions on property, plant and equipment and intangible assets".

The portion of recognised depreciation or amortisation that exceeds the economic amount, mainly calculated on a straight-line basis, is recorded in the balance sheet as a liability under "Regulatory provisions: accelerated depreciation and amortisation". BNP Paribas SA does not calculate the deferred tax effects of accelerated depreciation and amortisation.

When an asset consists of a number of components that may require replacement at regular intervals or that have different uses or different patterns of consumption of economic benefits, each component is recognised separately and depreciated using a method appropriate to that component. BNP Paribas SA has adopted the component-based approach for property used in operations.

The depreciation periods used for office property are as follows: eighty years or sixty years for the shell (for prime and other property respectively); thirty years for facades; twenty years for general and technical installations; and ten years for fixtures and fittings.

Depending on its type, software is amortised over a period of no more than eight years in relation to infrastructure developments and three years or five years in the case of software developed primarily for the purpose of providing services to customers.

Depreciable fixed assets are tested for impairment if there is an indication of potential impairment at the balance sheet date. Non-depreciable assets are tested for impairment annually.

If there is an indication of impairment, the new recoverable amount of the asset is compared with the carrying amount. If the asset is found to be materially impaired, an impairment loss is recognised in the profit and loss account. This impairment loss is reversed in the event of a change in the estimated recoverable amount or if there is no longer an indication of impairment, with the exception of goodwill and residual merger premium (see below) allocated to goodwill. Impairment losses are taken into account in the profit and loss account under "Depreciation, amortisation, and provisions on property, plant and equipment and intangible assets".

- Goodwill in the business is now presumed to have an unlimited period of use. It is therefore non-amortisable, without any required justification. However, this is a refutable presumption, meaning that if there is a limited period for use, the goodwill must be amortised over its actual or fixed period of use (ten years) if it is not possible to reliably assess this period. In addition, if goodwill is not amortised, it must now be tested for impairment annually regardless of whether there is any indication of impairment.
- The merger premium is allocated to the various assets contributed as a result of mergers and similar transactions up to the limit of identified unrealised gains. The amount is allocated in the dedicated sub-accounts of the assets concerned, according to the amortisation, depreciation and provisioning rules for these assets.
- After allocation to the different underlying assets (see above), the net balance of the residual merger premium is carried to goodwill.

Gains and losses on disposals of property, plant and equipment, and intangible assets used in operations are recognised in the profit and loss account under "Net gain (loss) on disposals of fixed assets".

AMOUNTS DUE TO CREDIT INSTITUTIONS AND CUSTOMERS

Amounts due to credit institutions and customers are classified by their initial term or their type: demand accounts and time deposits for credit institutions, and regulated savings accounts and other deposits for customers. These sections include securities and other assets sold under repurchase agreements depending on the type of counterparty. Accrued interest is recorded on a separate line.

DEBT SECURITIES

Debt securities are broken down between certificates of deposit, interbank market securities, negotiable debt securities, bonds and other debt instruments. This section does not include subordinated notes which are recorded under subordinated debt.

Accrued interest on debt securities is recorded on a separate line of the balance sheet and is debited to the profit and loss account.

Bond issue and redemption premiums are amortised using the yield-to-maturity method over the life of the bonds. Bond issuance costs are amortised using the straight-line method over the life of the bonds.

PROVISIONS FOR INTERNATIONAL COMMITMENTS

Provisions for international commitments are based on the evaluation of non-transfer risk related to the future solvency of each of the countries at risk and on the systemic credit risk incurred by debtors in the event of a constant and durable deterioration in the overall situation and economies of these countries. Additions and reversals of these provisions are reflected in the profit and loss account under "Cost of risk".

PROVISIONS FOR NON-BANKING TRANSACTIONS

BNP Paribas SA records provisions for clearly identified contingencies and charges whose timing or amount is uncertain. In accordance with current regulations, these provisions for non-banking transactions may be recorded only if the Bank has an obligation to a third party at year-end, there is a high probability of an outflow of resources to the third party, and no equivalent economic benefits are expected in return from the third party.

COST OF RISK

The "Cost of risk" line item includes expenses arising from the identification of counterparty and credit risks, litigation, and fraud inherent to banking transactions conducted with third parties. Net movements in provisions that do not fall under the category of such risks are classified in the profit and loss account according to their type.

FORWARD FINANCIAL INSTRUMENTS

Forward financial instruments are purchased on various markets for use as specific or general hedges of assets and liabilities, or for transaction purposes.

The Bank's commitments related to these instruments are recognised off-balance sheet at nominal value. The accounting treatment of these instruments depends on the corresponding investment strategy.

Derivatives held for hedging purposes

Income and expenses related to forward derivative financial instruments held for hedging purposes and designated to one instrument or a group of homogeneous instruments are recognised in income symmetrically with the income and expenses on the underlying instrument, and under the same accounting heading.

Income and expenses related to forward financial instruments used to hedge overall interest rate risk are recognised in income on a *prorata* basis.

Derivatives held for trading purposes

Derivatives held for trading purposes can be traded on organised markets or over-the-counter.

Derivatives held within a trading book are valued at market value on the balance sheet date. The corresponding gains or losses (realised and unrealised) are recognised in income. They are recognised in income under "Gains (losses) on trading account securities".

The market value is determined from either:

- the listed price, if one is available;
- a valuation method using recognised financial models and theories with parameters calculated from transaction prices observed on active markets, or from statistical or other quantitative methods.

In both cases, BNP Paribas SA makes conservative value adjustments to account for modelling, counterparty, and liquidity risks.

Some complex derivatives, which are typically custom-made from combined instruments and highly illiquid, are valued using models where certain parameters are not observable on an active market.

Until 31 December 2004, the Bank recognised gains from trading these complex derivatives immediately in income.

However, on 1 January 2005, the Bank began recognising these gains in income over the period during which the valuation parameters are expected to be unobservable. When parameters that were originally non-observable become observable, or when the valuation can be substantiated in comparison with recent similar transactions in an active market, the unrecognised portion of the profit is recognised in income.

Derivatives held within an isolated open position

Depending on the nature of the instruments, gains and losses on contracts representing isolated open positions are recognised in income when the contracts are settled or on a *prorata* basis. Derivatives are measured at market value on the balance sheet date and a provision for unrealised losses is recognised for each group of homogeneous contracts.

CORPORATE INCOME TAX

A charge for corporate income tax is taken in the period in which the related taxable income and expenses are booked, regardless of the period in which the tax is actually paid. When the period in which the income and expenses are booked differs from that in which the income is taxed and expenses deducted, BNP Paribas SA recognises a deferred tax, whose amount is calculated according to the liability method, with the basis taken to be all temporary differences between the book value and tax basis of balance sheet items, and applying applicable future tax rates once these have been approved. Deferred tax assets are recognised in accordance with the likelihood of their being recovered.

EMPLOYEE PROFIT-SHARING

As required by French law, BNP Paribas SA recognises employee profit-sharing in the year in which the employee entitlement arises. The amount is reported under "Salaries and employee benefit expenses" in the profit and loss account.

EMPLOYEE BENEFITS

BNP Paribas SA employees receive each of the following four types of benefits:

- termination benefits, payable primarily in the case of early termination of an employment contract;
- short-term benefits, such as salary, annual leave, incentive plans, profit-sharing and additional payments;
- long-term benefits, including compensated leaves of absence, long-service awards, and other types of cash-based deferred remuneration;
- post-employment benefits, including top-up banking industry pensions in France and pension plans in other countries, some of which are operated through pension funds.

Termination benefits

Termination benefits are employee benefits payable as a result of a decision by BNP Paribas SA to terminate a contract of employment before the legal retirement age or by an employee to accept voluntary redundancy in exchange for a benefit. Termination benefits due more than 12 months after the closing date are discounted.

Short-term benefits

BNP Paribas SA recognises an expense when it has used services rendered by employees in exchange for employee benefits.

Long-term benefits

Long-term benefits are benefits (other than post-employment benefits and termination benefits) which do not fall wholly due within 12 months after the end of the period in which the employee renders the associated services. The actuarial techniques used are similar to those used for defined-benefit post-employment benefits, except that actuarial gains and losses are recognised immediately, as are the effects of any plan amendments.

This relates in particular to cash remuneration deferred for more than 12 months, which is accrued in the financial statements for the period during which the employee provides the corresponding services. If the payment of deferred share-based variable remuneration is explicitly subject to the employee's continued employment at the vesting date, the services are presumed to have been rendered during the vesting period and the corresponding compensation expense is recognised on a *prorata* basis over that period. The expense is recognised under salary and employee benefits expenses with a corresponding liability in the balance sheet. It is revised to take account of any non-fulfilment of the continued presence or performance conditions, and changes in the BNP Paribas share price, for deferred remuneration indexed to the share.

If there is no continued presence condition, the expense is not deferred but recognised immediately with a corresponding liability in the balance sheet, which is then revised on each reporting date until settlement, to account for any performance conditions and changes in the BNP Paribas share price.

Post-employment benefits

The post-employment benefits provided to BNP Paribas SA employees in France include both defined-contribution plans and defined-benefit plans.

Defined-contribution plans, such as *Caisse Nationale d'Assurance Vieillesse* and supplemental national and trade union plans that pay pensions to former BNP Paribas SA employees in France, do not give rise to an obligation for BNP Paribas SA and consequently do not require a provision. The amount of employer's contributions payable during the period is recognised as an expense.

Only defined-benefit plans, such as the retirement packages paid for by BNP Paribas SA's retirement fund, give rise to an obligation for BNP Paribas SA. This obligation must be measured and recognised as a liability by means of a provision.

The classification of plans into these two categories is based on the economic substance of the plan, which is reviewed to determine whether BNP Paribas SA has a legal or constructive obligation to pay the agreed benefits to employees.

Post-employment benefit obligations under defined-benefit plans are measured using actuarial techniques that take into account demographic and financial assumptions. The amount of the obligation recognised as a liability is measured on the basis of the actuarial assumptions applied by the Group, using the projected unit credit method. This method takes into account various parameters, tailored to the country in question, such as demographic assumptions, the probability that employees will leave before retirement age, salary inflation, a discount rate, and the general inflation rate. The value of any plan assets is deducted from the amount of the obligation. When the value of the plan assets exceeds the amount of the obligation, an asset is only recognised if it represents a future economic benefit in the form of a reduction in future contributions or a future partial refund of amounts paid into the plan.

The amount of the obligation under a plan, and the value of the plan assets, may show significant fluctuations from one period to the next due to changes in actuarial assumptions, thereby giving rise to actuarial gains and losses. Actuarial gains and losses and the effect of limits on assets are recognised entirely in profit or loss. Expected gains from investments are calculated at the discount rate of the corresponding commitments.

RECOGNITION OF REVENUE AND EXPENSES

Interest and fees and commissions qualified as interest are recognised on an accrual basis. These include the commissions charged by the Bank as part of an overall loan package (i.e., application fees, commitment fees, participation fees, etc.). The marginal transaction costs that the Bank must pay when granting or acquiring loans are also spread out over the effective life of the corresponding loan.

Fees and commissions not qualified as interest that relate to the provision of services are recognised when the service is performed or, for ongoing services, on a *prorata* basis over the length of the service agreement.

FOREIGN CURRENCY TRANSACTIONS

Foreign exchange positions are generally valued at the official year-end exchange rate. Exchange gains and losses on transactions in foreign currency carried out in the normal course of business are recognised in the profit and loss account.

Exchange differences arising from the conversion of assets held on a long-term basis, including equity securities held for long-term investment, the capital made available to branches, and other foreign equity investments denominated in foreign currencies and financed in euros, are recognised as translation adjustments for the balance sheet line items recording the assets.

Exchange differences arising from the conversion of assets held on a long-term basis, including equity securities held for long-term investment, the capital made available to branches, and other foreign equity investments, denominated and financed in foreign currencies, are recognised symmetrically as translation differences for the corresponding financing.

TRANSLATION OF ACCOUNTS EXPRESSED IN FOREIGN CURRENCIES

Monetary and non-monetary foreign currency-denominated assets and liabilities of foreign branches are translated into euros at the year-end exchange rate. Translation adjustments regarding the capital made available to BNP Paribas SA branches outside of France are included in "Accrued income" and "Accrued expenses".

Note 2 NOTES TO THE 2019 PROFIT AND LOSS ACCOUNT

2.a NET INTEREST INCOME

BNP Paribas SA includes in "Interest income" and "Interest expense" all income and expenses from financial instruments measured at amortised cost according to the effective interest rate method (interest, commission and expenses) and from financial instruments measured at fair value that do not meet the definition of a derivative instrument. The change in fair value on financial instruments at fair value through profit or loss (excluding accrued interest) is recognised under "Gains (losses) on trading account securities".

Interest income and expense on derivatives accounted for as fair value hedges are included with the revenues generated by the hedged item.

In millions of euros	Year to 31 Dec. 2019		Year to 31 Dec. 2018	
	Income	Expenses	Income	Expenses
Credit institutions	**6,655**	**(4,967)**	**5,763**	**(4,159)**
Demand accounts, loans and borrowings	4,965	(3,461)	4,026	(2,863)
Securities given/received under repurchase agreements	1,517	(1,506)	1,571	(1,296)
Subordinated loans	173		166	
Customers	**12,185**	**(9,025)**	**10,759**	**(7,331)**
Demand accounts, loans, and term accounts	8,042	(3,798)	7,321	(3,308)
Securities given/received under repurchase agreements	4,134	(5,227)	3,428	(4,023)
Subordinated loans	9		10	
Finance lease	**1**			
Debt securities	**140**	**(4,514)**	**42**	**(3,848)**
Bonds and other fixed-income securities	**3,345**		**2,950**	
Trading account securities	395		75	
Securities available for sale	2,892		2,856	
Debt securities held to maturity	58		19	
Macro-hedging instruments	**120**		**188**	
INTEREST INCOME AND EXPENSE	**22,446**	**(18,506)**	**19,702**	**(15,338)**

2.b INCOME ON EQUITIES AND OTHER VARIABLE INSTRUMENTS

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Securities available for sale	20	78
Investments in subsidiaries and equity securities held for long-term investment	248	348
Investments in affiliates	5,955	4,094
INCOME ON EQUITIES AND OTHER VARIABLE INSTRUMENTS	**6,223**	**4,520**

2.c COMMISSIONS

In millions of euros	Year to 31 Dec. 2019		Year to 31 Dec. 2018	
	Income	Expenses	Income	Expenses
Commissions on banking and financing transactions	**2,723**	**(774)**	**2,089**	**(514)**
Customer items	1,405	(78)	1,411	(93)
Other	1,318	(696)	678	(421)
Commissions on financial services	**3,430**	**(530)**	**3,452**	**(545)**
COMMISSION INCOME AND EXPENSES	**6,153**	**(1,304)**	**5,541**	**(1,059)**

2.d GAINS OR LOSSES ON TRADING ACCOUNT SECURITIES

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Fixed-income instruments and transactions in trading account securities	3,434	3,701
Currency instruments	249	1,299
Credit instruments	772	1,082
Other variable income financial instruments and transactions in trading account securities	145	(2,800)
NET GAINS ON TRADING ACCOUNT SECURITIES	**4,600**	**3,282**

2.e GAINS OR LOSSES ON SECURITIES AVAILABLE FOR SALE

In millions of euros	Year to 31 Dec. 2019		Year to 31 Dec. 2018	
	Income	Expenses	Income	Expenses
Divestments	625	(141)	244	(113)
Provisions	154	(55)	106	(68)
TOTAL	**779**	**(196)**	**350**	**(181)**
NET GAINS ON SECURITIES AVAILABLE FOR SALE	**583**		**169**	

2.f COST OF RISK AND PROVISIONS FOR CREDIT RISKS

Cost of risk represents the net amount of impairment losses recognised with respect to credit risks inherent to BNP Paribas SA's banking intermediation activities, plus any impairment losses in the case of known counterparty risk on over-the-counter instruments.

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Additions to or write-backs from provisions during the period	**(595)**	**(176)**
Customer items and credit institutions	(509)	(374)
Off-balance sheet commitment	(30)	252
Securities	(54)	(41)
Doubtful loans	1	11
Financial instruments for market activities	(3)	(24)
Irrecoverable loans not covered by provisions	**(202)**	**(226)**
Recoveries of loans written-off	**38**	**70**
COST OF RISK	**(759)**	**(332)**

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Balance at 1 January	**6,370**	**6,689**
Additions to or write-backs from provisions during the period	595	176
Write-offs during the period covered by provisions	(1,165)	(1,183)
Effect of movements in exchange rates and other	976	688
PROVISIONS FOR CREDIT RISKS	**6,776**	**6,370**

The provisions break down as follows:

In millions of euros	31 December 2019	31 December 2018
Provisions deducted from assets	**6,469**	**6,089**
For amounts due from credit institutions *(note 3.a)*	191	157
For amounts due from customers *(note 3.b)*	5,965	5,644
For securities	277	228
For financial instruments for market activities	36	60
Provisions recognised as liabilities (note 3.k)	**307**	**281**
For off-balance sheet commitments	274	248
For doubtful loans	33	33
PROVISIONS FOR CREDIT RISKS	**6,776**	**6,370**

2.g GAINS OR LOSSES ON DISPOSALS OF LONG-TERM INVESTMENTS

In millions of euros	Year to 31 Dec. 2019		Year to 31 Dec. 2018	
	Income	Expenses	Income	Expenses
Investments in subsidiaries and equity securities held for long-term investment	**80**	**(22)**	**295**	**(121)**
Divestments	1	(19)	287	(1)
Provisions	79	(3)	8	(120)
Investments in affiliates	**551**	**(175)**	**170**	**(751)**
Divestments	274	(5)	79	(53)
Provisions	277	(170)	91	(698)
Operating assets	**175**	**(34)**	**2**	**(3)**
TOTAL	**806**	**(231)**	**467**	**(875)**
NET GAINS OR LOSSES ON DISPOSALS OF LONG-TERM INVESTMENTS		**575**		**(408)**

2.h CORPORATE INCOME TAX

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Current tax expense	(362)	506
Deferred tax	37	51
INCOME TAX	**(325)**	**557**

The basic tax consolidation agreements between BNP Paribas SA and the subsidiaries belonging to its tax group are designed to be tax neutral for every party. Each Group subsidiary recognises in its own books, over the full term of its consolidation, corporate income tax income or expense, additional contributions and all current or future taxes covered by the scope of tax consolidation just as they would if they were not part of a tax group. BNP Paribas SA, as the parent company, records the impact of Group tax savings from tax consolidation in France in current tax expense.

Note 3 NOTES TO THE BALANCE SHEET AT 31 DECEMBER 2019

3.a AMOUNTS DUE TO AND FROM CREDIT INSTITUTIONS

In millions of euros at	31 December 2019	31 December 2018
Loans and receivables	**162,253**	**154,592**
Demand accounts	5,759	7,444
Term accounts and loans	149,298	140,787
Subordinated loans	7,196	6,361
Securities received under repurchase agreements	**68,099**	**74,079**
LOANS AND ADVANCES TO CREDIT INSTITUTIONS BEFORE IMPAIRMENT	**230,352**	**228,671**
of which accrued interest	*544*	*868*
of which irrecoverable loans	*2*	*14*
of which potentially recoverable doubtful loans	*17*	*13*
Impairment on receivables due from credit institutions *(note 2.f)*	**(191)**	**(157)**
LOANS AND RECEIVABLES TO CREDIT INSTITUTIONS NET OF IMPAIRMENT	**230,161**	**228,514**

In millions of euros at	31 December 2019	31 December 2018
Deposits and borrowings	**183,575**	**174,099**
Demand deposits	13,332	11,444
Term deposits and borrowings	170,243	162,655
Securities given under repurchase agreements	**86,564**	**75,048**
DUE TO CREDIT INSTITUTIONS	**270,139**	**249,147**
of which accrued interest	*406*	*579*

3.b CUSTOMER ITEMS

In millions of euros at	31 December 2019	31 December 2018
Loans and receivables	**357,136**	**334,178**
Commercial and industrial loans	10,098	7,873
Demand accounts	15,036	17,476
Short-term loans	90,366	78,561
Mortgages	84,910	80,243
Equipment loans	53,974	49,328
Export loans	6,377	8,170
Other customer loans	95,523	90,991
Subordinated loans	852	1,536
Securities received under repurchase agreements	**144,763**	**121,628**
CUSTOMER ITEMS BEFORE IMPAIRMENT – ASSETS	**501,899**	**455,806**
of which accrued interest	*1,474*	*1,350*
of which loans eligible for refinancing by the Banque de France	*46*	*35*
of which potentially recoverable doubtful loans and receivables	*3,445*	*3,468*
of which irrecoverable loans and receivables	*5,206*	*5,339*
Impairment on receivables due from customers ***(note 2.f)***	**(5,965)**	**(5,644)**
CUSTOMER ITEMS NET OF IMPAIRMENT – ASSETS	**495,934**	**450,162**

The following table gives the loans and receivables net of impairment due from customers by counterparty:

	31 December 2019				31 December 2018			
		Doubtful loans				Doubtful loans		
In millions of euros at	Sound loans	Potentially recoverable	Irrecoverable	Total	Sound loans	Potentially recoverable	Irrecoverable	Total
Financial institutions	68,826	25	30	68,881	68,121	61	95	68,277
Corporate	187,679	1,139	1,790	190,608	171,269	1,451	1,667	174,387
Entrepreneurs	9,008	59	137	9,204	8,678	57	152	8,887
Individuals	75,781	258	482	76,521	68,940	239	627	69,806
Other non-financial customers	5,898	59	-	5,957	7,085	91	1	7,177
TOTAL LOANS AND RECEIVABLES NET OF IMPAIRMENT	**347,192**	**1,540**	**2,439**	**351,171**	**324,093**	**1,899**	**2,542**	**328,534**

In millions of euros at	31 December 2019	31 December 2018
Deposits	**418,668**	**418,241**
Demand deposits	207,763	190,910
Term deposits	140,378	157,768
Regulated savings accounts	70,527	69,563
of which demand regulated savings accounts	*52,617*	*52,116*
Securities given under repurchase agreements	**168,476**	**148,986**
CUSTOMER ITEMS – LIABILITIES	**587,144**	**567,227**
of which accrued interest	*1,095*	*1,053*

3.c SECURITIES HELD

In millions of euros at	31 December 2019		31 December 2018	
	Net carrying amount	Market value	Net carrying amount	Market value
Transaction	136,066	136,066	104,972	104,972
Securities available for sale	61,775	64,316	47,188	51,703
of which provisions	*(14)*		*(30)*	
Investments	787	790	361	363
TREASURY BILLS AND MONEY-MARKET INSTRUMENTS	**198,628**	**201,172**	**152,521**	**157,038**
of which receivables corresponding to loaned securities	*48,707*		*28,179*	
of which goodwill	*4,749*		*2,850*	
Transaction	18,942	18,942	42,775	42,775
Securities available for sale	54,573	55,731	48,346	49,671
of which provisions	*(272)*		*(206)*	
Investments	249	249	185	186
BONDS AND OTHER FIXED-INCOME SECURITIES	**73,764**	**74,922**	**91,306**	**92,632**
of which unlisted securities	*13,192*	*13,570*	*13,117*	*13,386*
of which accrued interest	*1,007*		*938*	
of which receivables corresponding to loaned securities	*20,018*		*7,070*	
of which goodwill	*224*		*174*	
Transaction	1,635	1,635	735	735
Securities available for sale and equity securities available for sale in the medium term	1,060	1,316	879	1,122
of which provisions	*(164)*		*(241)*	
EQUITIES AND OTHER VARIABLE-INCOME SECURITIES	**2,695**	**2,951**	**1,614**	**1,857**
of which unlisted securities	*1,014*	*1,267*	*832*	*1,073*
of which receivables corresponding to loaned securities	*1,156*		*428*	
Associated companies	2,935	4,821	2,978	4,628
of which provisions	*(162)*		*(163)*	
Equity securities held for long-term investment	564	747	523	620
of which provisions	*(237)*		*(240)*	
INVESTMENTS IN SUBSIDIARIES AND EQUITY SECURITIES HELD FOR LONG-TERM INVESTMENT	**3,499**	**5,568**	**3,501**	**5,248**
of which unlisted securities	*1,988*	*3,173*	*1,990*	*3,197*
Investments in affiliates	62,016	93,842	63,284	99,013
of which provisions	*(7,640)*		*(7,863)*	
INVESTMENTS IN AFFILIATES	**62,016**	**93,842**	**63,284**	**99,013**

Equity investments in credit institutions and investments in affiliates held by BNP Paribas totalled EUR 951 million and EUR 32,222 million, respectively at 31 December 2019, compared with EUR 945 million and EUR 31,371 million, respectively, at 31 December 2018.

3.d TREASURY SHARES

In millions of euros at	31 December 2019		31 December 2018
	Gross carrying amount	Net carrying amount	Net carrying amount
Transaction	-	-	-
Securities available for sale	6	6	6
Investment in subsidiaries	32	32	32
TREASURY SHARES	**38**	**38**	**38**

The fifth resolution of the Shareholders' Combined General Meeting of 23 May 2019, which replaced the fifth resolution of the Shareholders' Combined General Meeting of 24 May 2018, authorised BNP Paribas SA to buy back shares representing up to 10% of the Bank's issued capital at a maximum purchase price of EUR 73 per share (unchanged from 31 December 2018). The shares could be acquired for the following purposes: for subsequent cancellation in accordance with conditions set by the Shareholders' Combined General Meeting of 23 May 2019, to fulfil the Bank's obligations relative to the issue of shares or share equivalents, for stock option plans, for share awards, or for granting or selling shares to employees under an employee profit-sharing plan, employee share ownership plan or Corporate Savings Plan and to cover any type of share award to the employees of BNP Paribas SA and companies controlled exclusively by BNP Paribas SA within the meaning of article L.233-16 of the French Commercial Code; to be held in treasury for subsequent remittance in exchange or payment for acquisitions, mergers, spin-offs or asset transfers; within the scope of a market-making agreement compliant with the Code of Ethics recognised by the AMF; or for asset and financial management purposes.

This authorisation was granted for a period of 18 months.

At 31 December 2019, BNP Paribas SA held 608,675 treasury shares classified as "Equity securities held for long-term investment".

BNP Paribas SA also held 117,776 treasury shares classified as "Securities available for sale" and intended to be used for free share awards to Group employees, granted or sold as part of an employee profit-sharing plan, employee share ownership plan, or Company Savings Plan.

3.e LONG-TERM INVESTMENTS

In millions of euros	Gross values					Provisions					Carrying amount	
	1 Jan. 2019	Purchases	Disposals and redemptions	Transfers and other movements	31 Dec. 2019	1 Jan. 2019	Additions	Write-backs	Other variations	31 Dec. 2019	31 Dec. 2019	31 Dec. 2018
Debt securities held to maturity *(note 3.c)*	546	531	(50)	9	1,036						1,036	546
Investments in subsidiaries and equity securities held for long-term investment *(notes 3.c)*	3,904	97	(103)		3,898	403	3	(7)		399	3,499	3,501
Investments in affiliates (note 3.c)	71,147	1,129	(1,741)	(879)	69,656	7,863	169	(278)	(114)	7,640	62,016	63,284
of which merger premium on investments in affiliates	*4,258*				*4,258*	*3,644*	*5*	*(243)*		*3,406*	*852*	*614*
Treasury shares *(note 3.d)*	32				32						32	32
LONG-TERM INVESTMENTS	**75,629**	**1,757**	**(1,894)**	**(870)**	**74,622**	**8,266**	**172**	**(285)**	**(114)**	**8,039**	**66,583**	**67,363**

3.f DEBT SECURITIES

In millions of euros at	31 December2019	31 December 2018
Negotiable debt securities	90,524	106,196
Bond issues *(note 3.g)*	1,958	2,278
Other debt securities	42,522	25,485
DEBT SECURITIES	**135,004**	**133,959**
of which unamortised issuance premiums	*682*	*653*

3.g BOND ISSUES

Maturities of bonds issued by BNP Paribas SA, according to contractual maturity:

In millions of euros	Outstanding at 31/12/2019	2020	2021	2022	2023	2024	2025 to 2029	After 2029
Bond issues	1,958	142	316	370	258	170	364	339
In millions of euros	**Outstanding at 31/12/2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024 to 2028**	**After 2028**
Bond issues	2,278	326	558	378	285	177	351	202

3.h OTHER ASSETS AND LIABILITIES

In millions of euros at	31 December 2019	31 December 2018
Options purchased	62,776	77,561
Settlement accounts related to securities transactions	767	786
Deferred taxes – assets	977	888
Miscellaneous assets	64,944	55,181
OTHER ASSETS	**129,464**	**134,416**
Options sold	60,114	71,928
Settlement accounts related to securities transactions	307	884
Liabilities related to securities transactions	127,282	136,966
Deferred taxes – liabilities	120	103
Miscellaneous liabilities	59,265	42,985
OTHER LIABILITIES	**247,088**	**252,866**

Under “Miscellaneous liabilities”, BNP Paribas SA’s trade payables of BNP Paribas amount to EUR 76.9 million at 31 December 2019 and break down as follows, pursuant to article D.441-4 of the French Commercial Code.

Invoices *received*, due and outstanding at the year-end						
	0 days (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	90 days and over	Total (1 day and more)
Total invoices concerned, including taxes *(in millions of euros)*	17.8	20.7	7.7	3.8	26.9	59.1
Percentage of total purchases for the year, including taxes	0.34%	0.39%	0.15%	0.07%	0.51%	1.12%
Number of invoices concerned	2,122					4,959

Information related to invoices received and presented in the table above does not include banking and related transactions. The payment terms used are the statutory terms. Customer advances outside the scope of banking and related transactions are mainly loans to BNP Paribas Group entities. For amounts due to and from customers of BNP Paribas SA for banking and related transactions which are not shown in the table above, the remaining term of the sources and uses of funds is presented in note 6.e.

3.i ACCRUED INCOME

In millions of euros at	31 December 2019	31 December 2018
Remeasurement of currency instruments and derivatives	75,862	53,462
Accrued income	10,126	10,539
Collection accounts	193	271
Other accrued income	9,638	6,960
ACCRUED INCOME	**95,819**	**71,232**
Remeasurement of currency instruments and derivatives	61,657	46,499
Accrued expenses	11,222	12,233
Collection accounts	2,399	2,331
Other accrued expenses	9,501	7,241
ACCRUED EXPENSES	**84,779**	**68,304**

3.j OPERATING ASSETS

	31 December 2019			31 December 2018
In millions of euros at	Gross value	Depreciation, amortisation and impairment	Net amount	Net amount
Software	3,098	(2,367)	731	640
Other intangible assets	2,499	(468)	2,031	2,025
INTANGIBLE ASSETS	**5,597**	**(2,835)**	**2,762**	**2,665**
Land and buildings	2,881	(1,073)	1,808	1,866
Equipment, furniture and fixtures	2,148	(1,703)	445	387
Other fixed assets	188	(4)	184	143
Tangible assets – Merger premiums	134	(32)	102	108
TANGIBLE ASSETS	**5,351**	**(2,812)**	**2,539**	**2,504**

3.k PROVISIONS

In millions of euros at	31 December 2018	Additions	Write-backs	Other variations	31 December 2019
Provision for employee benefit obligations	463	95	(126)	43	475
Provisions for credit risks *(note 2.f)*	33	6	(6)	-	33
Provisions for commitments given *(note 2.f)*	248	105	(77)	(2)	274
Other provisions					
■ for banking transactions	516	51	(217)	12	362
■ for non-banking transactions	421	303	(141)	(4)	579
PROVISIONS	**1,681**	**560**	**(567)**	**49**	**1,723**

PROVISIONS FOR RISKS ON REGULATED SAVINGS PRODUCTS

In millions of euros at	31 December 2019	31 December 2018
Deposits collected under home savings accounts and plans	**17,994**	**17,937**
of which for home savings plans	15,912	15,834
■ *Aged more than 10 years*	*5,194*	*3,796*
■ *Aged between 4 and 10 years*	*8,715*	*8,406*
■ *Aged less than 4 years*	*2,003*	*3,632*
Outstanding loans granted under home savings accounts and plans	**35**	**51**
of which for home savings plans	6	9
Provisions for home savings accounts and plans	**124**	**135**
of which discount on home savings accounts and plans	0	0
of which provisions for home savings accounts and plans	124	135
■ *of which provisions for plans aged more than 10 years*	*92*	*75*
■ *of which provisions for plans aged between 4 and 10 years*	*23*	*37*
■ *of which provisions for plans aged less than 4 years*	*8*	*20*
■ *of which provisions for home savings accounts*	*1*	*3*

CHANGE IN PROVISIONS FOR REGULATED SAVINGS PRODUCTS

	Year to 31 Dec. 2019		Year to 31 Dec. 2018	
In millions of euros	Provisions for home savings plans	Provisions for home savings accounts	Provisions for home savings plans	Provisions for home savings accounts
Provisions at start of period	**132**	**3**	**153**	**3**
Additions to provisions during the period	-	-	-	-
Provision write-backs during the period	(9)	(2)	(21)	-
Provisions at end of period	**123**	**1**	**132**	**3**

3.1. SUBORDINATED DEBT

In millions of euros at	31 December 2019	31 December 2018
Redeemable subordinated debt	**16,130**	**14,405**
Undated subordinated debt	**9,700**	**9,115**
Undated Super Subordinated notes	8,977	8,397
Undated Floating-Rate Subordinated notes	498	493
Undated Participating Subordinated notes	225	225
Related debt	**382**	**344**
SUBORDINATED DEBT	**26,212**	**23,864**

Redeemable subordinated debt

The redeemable subordinated debt issued by BNP Paribas SA is in the form of medium and long-term debt securities equivalent to ordinary subordinated debt; these issues are redeemable prior to the contractual maturity date in the event of liquidation of the issuer, and rank after the other creditors but before holders of participating loans and participating subordinated notes.

These debt issues may contain a call provision authorising the Group to redeem the securities prior to maturity by repurchasing them in the stock market, via a public tender or exchange offers, or (in the case of private placements) over the counter, subject to regulatory approval.

Debt issued by BNP Paribas SA via placements in the international markets may be subject to early redemption of the capital and early payment of interest due at maturity at the issuer's discretion on or after a date stipulated in the issue particulars (call option), or in the event that changes in the applicable tax rules oblige the BNP Paribas Group issuer to compensate debt-holders for the consequences of such changes. Redemption may be subject to a notice period of between 15 and 60 days and is subject to approval by the banking supervisory authorities.

In 2018, a subordinated note was redeemed at or before maturity resulting in a EUR 85 million reduction in outstanding redeemable subordinated debt. In addition, five subordinated notes were issued in 2018 totalling EUR 1,832 million.

In 2019, eight new subordinated debts were issued in the amount of EUR 1,548 million.

The following table gives the maturity schedule for redeemable subordinated debt at 31 December 2019:

In millions of euros	Outstanding at 31/12/2019	2020	2021	2022	2023	2024	2025 to 2029	After 2029
Redeemable subordinated debt	16,130	5	-	354	-	891	11,703	3,176

The following table gives the maturity schedule for redeemable subordinated debt at 31 December 2018:

In millions of euros	Outstanding at 31/12/2018	2019	2020	2021	2022	2023	2024 to 2028	After 2028
Redeemable subordinated debt	14,405	-	5	-	335	-	12,154	1,911

Undated subordinated debt

Undated Super Subordinated notes

BNP Paribas has issued Undated Super Subordinated Notes which pay a fixed, fixed adjustable or floating rate coupon and are redeemable at the end of a fixed period and thereafter at each coupon date or every five years. If the notes are not redeemed at the end of this period, some of these issues will pay a coupon indexed to Euribor, Libor or a swap or fixed rate.

On 2 July 2018, BNP Paribas SA redeemed the June 2008 issue for a total amount of EUR 500 million at its first call date. This issue paid a fixed-rate coupon of 7.781%.

On 16 August 2018, BNP Paribas SA issued Undated Super Subordinated notes in the amount of USD 750 million. This issue pays a fixed-rate coupon of 7%. These notes could be redeemed at the end of a period of 10 years. If the notes are not redeemed in 2028, a coupon indexed to the five-year dollar swap rate will be paid half-yearly.

On 18 September 2018, BNP Paribas SA redeemed the September 2008 issue for a total amount of EUR 100 million at its first call date. This issue paid a fixed-rate coupon of 7.57%.

On 25 March 2019, BNP Paribas SA issued Undated Super Subordinated notes in the amount of USD 1,500 million. This issue pays a fixed-rate coupon of 6.625%. The notes are redeemable after five years. If the notes are not redeemed in 2024, a coupon indexed to the five-year dollar swap rate will be paid half-yearly.

On 10 July 2019, BNP Paribas SA issued Undated Super Subordinated notes in the amount of AUD 300 million. This issue pays a fixed-rate coupon of 4.5%. The notes are redeemable after five years and six months. If the notes are not redeemed in 2025, a coupon indexed to the five-year Australian dollar swap rate will be paid half-yearly.

On 17 October 2019, BNP Paribas SA redeemed the October 2005 issue, for an amount of EUR 1,000 million. This issue paid a fixed-rate coupon of 4.875%.

On 20 November 2019, BNP Paribas SA redeemed the December 2009 issue for EUR 1 million, before the first call date. This issue paid a fixed-rate coupon of 7.384%.

On 29 December 2019, BNP Paribas SA redeemed the two December 2009 issues, for EUR 17 million and EUR 2 million, respectively, at the first call date. The notes pay a fixed-rate coupon of 7.028% and a Euribor 3-month floating-rate coupon.

On 30 December 2019, BNP Paribas SA redeemed the December 2009 issue for EUR 70 million, at the first call date. The note paid a Libor 3-month dollar floating-rate coupon.

The table below summarises the characteristics of these various issues:

Issue date	Currency	Amount in original currency *(in millions)*	Coupon frequency	Rate and term before first call date		Rate after first call date	31 Dec. 2019	31 Dec. 2018
October 2005	EUR	1,000	annual	4.875%	6 years	4.875%	0	1,000
October 2005	USD	400	annual	6.25%	6 years	6.250%	356	349
July 2006	EUR	150	annual	5.45%	20 years	3-month Euribor +1.920%	150	150
June 2007	USD	600	quarterly	6.5%	5 years	6.500%	535	524
June 2007	USD	1,100	semi-annual	7.195%	30 years	USD 3-month Libor +1.290%	980	960
December 2009	EUR	2	quarterly	3-month Euribor +3.750%	10 years	3-month Euribor +4.750%	0	2
December 2009	EUR	17	annual	7.028%	10 years	3-month Euribor +4.750%	0	17
December 2009	USD	70	quarterly	USD 3-month Libor +3.750%	10 years	USD 3-month Libor +4.750%	0	61
December 2009	USD	0.5	annual	7.384%	10 years	USD 3-month Libor +4.750%	0	1
June 2015	EUR	750	semi-annual	6.125%	7 years	EUR 5-year swap +5.230%	750	750
August 2015	USD	1,500	semi-annual	7.375%	10 years	USD 5-year swap +5.150%	1,337	1,309
March 2016	USD	1,500	semi-annual	7.625%	5 years	USD 5-year swap +6.314%	1,337	1,309
December 2016	USD	750	semi-annual	6.750%	5.25 years	USD 5-year swap +4.916%	669	655
November 2017	USD	750	semi-annual	5.125%	10 years	USD 5-year swap +2.838%	669	655
Aug. 2018	USD	750	semi-annual	7.000%	10 years	USD 5-year swap +3.980%	669	655
March 2019	USD	1,500	semi-annual	6.625%	5 years	USD 5-year swap +4.149%	1,337	0
July 2019	AUD	300	semi-annual	4.500%	5.5 years	AUD 5-year swap +3.372%	188	0
UNDATED SUPER SUBORDINATED NOTES							**8,977**	**8,397**

BNP Paribas has the option of not paying interest due on these Undated Super Subordinated notes. Unpaid interest is not carried forward.

For notes issued before 2015, this non-payment is subject to the absence of any payment on BNP Paribas SA ordinary shares or on Undated Super Subordinated note equivalents in the previous year. This interest must be paid when dividends are paid on BNP Paribas SA's ordinary shares.

The contracts relating to these Undated Super Subordinated notes include a loss absorption clause. Under the terms of this clause, in the event of insufficient regulatory capital, the nominal value of the notes may be reduced in order to serve as a new basis for the calculation of the related coupons until the capital deficiency is made up, and the nominal value of the notes is restored to its original amount.

Undated Floating-Rate Subordinated notes

The Undated Floating-Rate Subordinated notes (TSDIs) and other Undated Subordinated notes issued by BNP Paribas SA are redeemable on liquidation of the Bank after repayment of all other debts but ahead of Undated Participating Subordinated notes. They confer no rights over residual assets.

Characteristics of Undated Floating-Rate Subordinated notes:

Issue date	Currency	Amount in original currency *(in millions)*	Interest rate	31 December 2019	31 December 2018
October 1985	EUR	305	TMO – 0.25%	254	254
September 1986	USD	500	6-month Libor +0.075%	244	239
UNDATED FLOATING-RATE SUBORDINATED NOTES				**498**	**493**

Payment of interest is obligatory on the TSDIs issued in October 1985 (representing a nominal amount of EUR 305 million), but the Board of directors may postpone interest payments if the Ordinary Shareholders' General Meeting notes that there is no income available for distribution in the twelve months preceding the interest payment date. Interest is cumulative and becomes payable in full when the bank resumes dividend payments.

Payment of interest is obligatory on the TSDIs issued in September 1986 (representing a nominal amount of USD 500 million), but the Board of directors may postpone interest payments if the Shareholders' General Meeting approves a decision not to pay a dividend in the twelve months preceding the interest payment date. Interest is cumulative and becomes payable in full when the bank resumes dividend payments. The bank may resume the payment of past interest even if dividend payments have not resumed.

Undated Participating Subordinated notes

Undated participating subordinated notes issued by BNP Paribas SA in July 1984 in a total amount of EUR 337 million are redeemable only in the event of the liquidation of BNP Paribas SA, but may be retired on the terms specified in the French act of 3 January 1983. The number of notes outstanding was 1,434,092 at 31 December 2019.

Note 4 FINANCING AND GUARANTEE AND SECURITIES COMMITMENTS

4.a FINANCING COMMITMENTS

In millions of euros at	31 December 2019	31 December 2018
Credit institutions	**96,003**	**80,610**
Customers	**234,757**	**225,125**
Confirmed letters of credit	97,248	102,446
Other commitments given to customers	137,509	122,679
FINANCING COMMITMENTS GIVEN	**330,760**	**305,735**
Credit institutions	**114,010**	**98,537**
Customers	**34,422**	**47,615**
FINANCING COMMITMENTS RECEIVED	**148,432**	**146,152**

4.b GUARANTEE AND SECURITIES COMMITMENTS

In millions of euros at	31 December 2019	31 December 2018
Credit institutions	19,611	20,155
Customers	108,431	96,343
GUARANTEE COMMITMENTS GIVEN	**128,042**	**116,498**
Credit institutions	84,418	81,810
Customers	160,638	130,766
GUARANTEE COMMITMENTS RECEIVED	**245,056**	**212,576**

In millions of euros at	31 December 2019	31 December 2018
COMMITMENTS GIVEN ON SECURITIES	**23,433**	**15,774**
COMMITMENTS RECEIVED ON SECURITIES	**35,672**	**27,677**

4.c FINANCIAL INSTRUMENTS GIVEN OR RECEIVED AS COLLATERAL

➤ FINANCIAL INSTRUMENTS GIVEN AS COLLATERAL

In millions of euros at	31 December 2019	31 December 2018
Financial instruments (negotiable securities and private receivables) deposited with central banks and eligible for use at any time as collateral for refinancing transactions after haircut	50,884	50,821
■ Used as collateral with central banks	16,172	19,000
■ Available for refinancing transactions	34,712	31,821
Financial assets pledged as collateral for transactions with credit institutions, financial customers or subscribers of covered bonds issued by the Group	72,895	58,950

At 31 December 2019, the Bank had EUR 50,884 million of financial instruments (negotiable securities and private receivables) deposited or pledged with central banks for use at any time as collateral for refinancing transactions (vs. EUR 50,821 million at 31 December 2018). This amount includes EUR 37,890 million deposited with the Banque de France (vs. EUR 36,994 million at 31 December 2018) under the Banque de France's comprehensive collateral management system to cover Eurosystem monetary policy transactions and intraday loans. At 31 December 2019 the Bank had EUR 16,172 million of collateral deposited with central banks (EUR 19,000 million at 31 December 2018).

The other assets that the Bank has pledged as collateral with credit institutions and financial customers totalled EUR 32,252 million at 31 December 2019 (vs. EUR 33,751 million at 31 December 2018), included in particular financing for BNP Paribas Home Loan SFH.

➤ FINANCIAL INSTRUMENTS RECEIVED AS COLLATERAL

In millions of euros at	31 December 2019	31 December 2018
Financial instruments received as collateral (excluding repurchase agreements)	38,891	34,354

Note 5 SALARIES AND EMPLOYEE BENEFITS

5.a SALARIES AND EMPLOYEE BENEFIT EXPENSES

In millions of euros	Year to 31 Dec. 2019	Year to 31 Dec. 2018
Salaries	(4,653)	(4,012)
Tax and social security charges(1)	(1,843)	(1,876)
Employee profit-sharing and incentive plans	(204)	(228)
TOTAL SALARIES AND EMPLOYEE BENEFIT EXPENSES	**(6,700)**	**(6,116)**

(1) Including adjustments for actuarial gains and losses on post-employment benefits.

For BNP Paribas SA, the Competitiveness and Employment Tax Credit (CICE) stood at EUR 35 million at 31 December 2018.

The following table gives the breakdown of BNP Paribas SA's headcount:

Headcount at	31 December 2019	31 December 2018
Employees in Metropolitan France	35,749	36,720
of which managers	*25,220*	*25,059*
Employees outside Metropolitan France	18,131	17,579
TOTAL BNP PARIBAS SA	**53,880**	**54,299**

5.b EMPLOYEE BENEFIT OBLIGATIONS

Post-employment benefits under defined-contribution plans

In France, BNP Paribas SA pays contributions to various nationwide basic and top-up pension plans. BNP Paribas SA has set up a funded pension plan under a company-wide agreement. Under this plan, employees will receive an annuity on retirement in addition to the pension paid by national schemes.

Furthermore, since defined-benefit plans have been closed to new employees in most countries outside France, they are offered the benefit of joining defined-contribution pension plans. Under these plans, the Group's obligation is essentially limited to paying a percentage of the employee's annual salary into the plan.

The amount paid into defined-contribution post-employment plans in France and other countries for the year 2019 was EUR 312 million, compared with EUR 294 million for the year 2018.

Post-employment benefits under defined-benefit plans

Existing legacy defined-benefit plans within BNP Paribas SA are valued independently using actuarial techniques by applying the projected unit cost method in order to determine the expense arising from rights vested in employees and benefits payable to retired employees. The demographic and financial assumptions used to estimate the present value of these obligations and of plan assets take into account economic conditions specific to each country.

Provisions set up to cover obligations under defined- benefit post-employment plans totalled EUR 175 million at 31 December 2019 (against EUR 171 million at 31 December 2018), comprised of EUR 95 million for French plans and EUR 80 million for other plans.

BNP Paribas recognised EUR 310 million of retirement plan assets (recognised surplus and reimbursement rights) at 31 December 2019 as compared to EUR 264 million at 31 December 2018.

Pension plans and other post-employment benefits

Pension plans

In France, BNP Paribas SA pays a top-up banking industry pension arising from rights acquired to 31 December 1993 by retired employees at that date and active employees in service at that date. These residual pension obligations are covered by a provision in BNP Paribas SA's financial statements or transferred to an insurance company.

The defined-benefit plans previously granted to Group executives have all been closed and converted into top-up type schemes. The amounts to be allocated to the beneficiaries, subject to their presence within the Group at retirement, were fixed when the previous schemes were closed. These pension plans have been outsourced to insurance companies. The market value of the related plan assets in these companies' balance sheets breaks down as 86% bonds, 6% equities and 8% property assets.

In BNP Paribas SA's foreign branches, pension plans are based either on pensions linked to the employee's final salary and length of service (United Kingdom), or on annual vesting of rights to a capital sum expressed as a percentage of annual salary and remunerated at a predefined rate (United States). Following the merger between BNP Paribas España SA and BNP Paribas SA, the subsidiary's commitments were transferred to the BNP Paribas SA branch in Madrid.

Some plans are managed by independent fund managers. As of 31 December 2019, 90% of the gross obligations under these plans related to plans in the United Kingdom, United States and Spain. The market value of the related plan assets was split as follows: 14% equities, 71% bonds, and 15% other financial instruments.

Other post-employment benefits

BNP Paribas SA employees also receive various other contractual postemployment benefits, such as indemnities payable on retirement. BNP Paribas' obligations for these benefits in France are funded through a contract held with an insurer that is independent from BNP Paribas SA.

Post-employment healthcare benefits

In France, BNP Paribas SA no longer has any obligation in relation to healthcare benefits for its retired employees.

Among BNP Paribas SA's foreign branches, there are several healthcare benefit plans for retired employees, mainly in the United States. Provisions for obligations under these plans amounted to EUR 16 million at 31 December 2019, compared to EUR 15 million at 31 December 2018.

Obligations under post-employment healthcare benefit plans are measured using the mortality tables applicable in each country and assumptions about trends in healthcare costs. They also build in assumptions about healthcare benefit costs, including forecast trends in the cost of healthcare services and in inflation, which are derived from historical data.

Termination benefits

The Bank has implemented a number of voluntary redundancy plans and a headcount adaptation plan for employees who meet certain eligibility criteria. The obligations to eligible active employees under such plans are provided for when the plan is the subject of an agreement or a bilateral draft agreement.

Provisions for these plans totalled EUR 42 million at 31 December 2019 (EUR 53 million at 31 December 2018).

In millions of euros at	31 December 2019	31 December 2018
Provision for voluntary departure, early retirement plans, and headcount adaptation plans	42	53

Note 6 ADDITIONAL INFORMATION

6a TRANSACTIONS IN SHARE CAPITAL

Resolutions of Shareholders' General Meetings that can be used during the financial year are presented in chapter 2 "*Corporate governance report*" of the Universal Registration document.

Operations affecting share capital	Number of Shares	Par value *(in euros)*	In euros	Date of authorisation by the Annual General Meeting	Date of decision by Board of directors	Date from which shares carry dividend rights
NUMBER OF SHARES ISSUED AT 31 DECEMBER 2016	**1,247,002,653**	**2**	**2,494,005,306**			
Increase in share capital by exercise of stock subscription options	1,404,830	2	2,809,660	(1)	(1)	01 Jan. 16
Increase in share capital by exercise of stock subscription options	451,903	2	903,806	(1)	(1)	01 Jan. 17
NUMBER OF SHARES ISSUED AT 31 DECEMBER 2017	**1,248,859,386**	**2**	**2,497,718,772**			
Increase in share capital by exercise of stock subscription options	939,175	2	1,878,350	(1)	(1)	01 Jan. 17
NUMBER OF SHARES ISSUED AT 31 DECEMBER 2018	**1,249,798,561**	**2**	**2,499,597,122**			
NUMBER OF SHARES ISSUED AT 31 DECEMBER 2019	**1,249,798,561**	**2**	**2,499,597,122**			

(1) Various resolutions voted in the Annual General Meeting and decisions of the Board of directors authorising the granting of stock subscription options that were exercised during the period.

6.b STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY FROM 31 DECEMBER 2017 TO 31 DECEMBER 2019

In millions of euros	Share capital	Additional paid-in capital	Retained earnings and net income for the period	Total shareholders' equity
SHAREHOLDERS' EQUITY AT 31 DECEMBER 2017	**2,498**	**23,175**	**42,142**	**67,815**
Dividend payout for 2017			(3,772)	(3,772)
Capital increases	2	47		49
Accelerated depreciation and amortisation – Additions			4	4
Net income for 2018			5,027	5,027
SHAREHOLDERS' EQUITY AT 31 DECEMBER 2018	**2,500**	**23,222**	**43,401**	**69,123**
Dividend payout for 2018			(3,772)	(3,772)
Accelerated depreciation and amortisation – Additions			5	5
Other variations			(11)	(11)
Net income for 2019			7,490	7,490
SHAREHOLDERS' EQUITY AT 31 DECEMBER 2019	**2,500**	**23,222**	**47,113**	**72,835**

6.c NOTIONAL AMOUNTS OF FINANCIAL INSTRUMENTS

The notional amounts of derivative instruments are merely an indication of the volume of BNP Paribas SA's activities in financial instrument markets, and do not reflect the market risks associated with such instruments.

Trading portfolio

In millions of euros at	31 December 2019	31 December 2018
Currency derivatives	5,204,615	5,020,965
Interest rate derivatives	16,009,284	17,235,390
Equity Derivatives	1,202,896	1,290,807
Credit Derivatives	952,428	879,064
Other derivatives	211,034	225,733
FORWARD FINANCIAL INSTRUMENTS IN THE TRADING PORTFOLIO	**23,580,257**	**24,651,959**

Financial instruments traded on organised markets or admitted to clearing houses accounted for 43% of the Bank's derivatives transactions at 31 December 2019 (compared with 44% at 31 December 2018).

Hedging strategy

The total notional amount of derivative financial instruments used for hedging purposes stood at EUR 727,769 million at 31 December 2019, compared with EUR 686,468 million at 31 December 2018.

Derivatives used for hedging purposes are primarily contracted on over-the-counter markets.

Market value

The market value of the Bank's positive net position on outright transactions was EUR 16,096 million at 31 December 2019, compared with a positive net position of EUR 9,749 million at 31 December 2018. The market value of the Bank's net long position on conditional transactions was valued at EUR 2,845 million at 31 December 2019, compared with a net short position of EUR 3,467 million at 31 December 2018.

6.d SEGMENT INFORMATION

The following table gives a regional breakdown of BNP Paribas SA's interbank transactions and customer items recognised on the balance sheet:

	Interbank transactions		Customer items		Total by region	
In millions of euros at	31 December 2019	31 December 2018	31 December 2019	31 December 2018	31 December 2019	31 December 2018
France	409,850	394,245	275,270	236,620	685,120	630,865
Other countries in the European Economic Area	69,276	69,580	83,244	80,855	152,520	150,435
Americas and Asia	79,936	81,392	131,804	128,408	211,740	209,800
Other countries	1,754	1,439	5,616	4,279	7,370	5,718
TOTAL USES OF FUNDS	**560,816**	**546,656**	**495,934**	**450,162**	**1,056,750**	**996,818**
France	205,874	195,131	270,845	263,619	476,719	458,750
Other countries in the European Economic Area	42,882	25,136	112,015	123,378	154,897	148,514
Americas and Asia	24,424	28,907	198,058	173,658	222,482	202,565
Other countries	1,381	1,180	6,226	6,572	7,607	7,752
TOTAL SOURCES OF FUNDS	**274,561**	**250,354**	**587,144**	**567,227**	**861,705**	**817,581**

85% of BNP Paribas SA's revenues in 2019 came from counterparties in the European Economic Area (84% in 2018).

6.e SCHEDULE OF USES AND SOURCES OF FUNDS

In millions of euros	Demand and overnight transactions	Term remaining					
		Up to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	Of which provisions	Total
Uses of funds							
Cash and amounts due from central banks and CCP	131,249	778					**132,027**
Treasury bills and money-market instruments	203	81,584	15,524	45,717	55,600	(14)	**198,628**
Due from credit institutions	8,911	99,695	38,826	48,124	34,605	(191)	**230,161**
Customer and leasing transactions	32,610	192,269	51,279	94,003	125,773	(5,965)	**495,934**
Bonds and other fixed-income securities	1,199	19,668	5,369	10,755	36,773	(272)	**73,764**
Sources of funds							
Amounts due to credit institutions and central banks and CCP	31,732	122,764	29,246	77,418	13,401		**274,561**
Customer items	315,951	227,358	18,273	12,952	12,610		**587,144**
Debt securities	589	16,988	35,337	43,322	38,768		**135,004**

6.f NON-COOPERATIVE STATES AND TERRITORIES

Authorisation from the Group's Compliance Department must be obtained through a special procedure before BNP Paribas SA or Group subsidiaries that report to BNP Paribas SA can open a location in a state considered "uncooperative" as defined by article 238-0 A of the French General Tax Code and the Order issued on 6 January 2020 amending the list of uncooperative states. In accordance with BNP Paribas' "best interests" principle, and to ensure that the Group's internal control mechanisms are applied consistently, these locations are subject to the Group's regulations on risk management, anti-money laundering, corruption, financial embargoes, and terrorism financing.

Company name	Ownership interest (%)	Legal form	Type of licence	Business activity
Panama				
BNPP SA (Panama branch) – in liquidation[(1)]	100	Branch	Banking licence	In liquidation
British Virgin Islands				
Twenty-Three Investments Ltd – in liquidation	100	Investments Limited		In liquidation

(1) The liquidation process of the entity located in Panama, initiated in July 2010, is pending approval from the local regulator.

6.2 Appropriation of income for the year ended 31 December 2019 and dividend distribution

At the Annual General Meeting of 19 May 2020, the Board of directors will propose an appropriation of income for the year ended 31 December 2019 and dividend distribution under the following terms:

In millions of euros	
Net income	7,490
Unappropriated retained earnings	30,506
TOTAL INCOME TO BE APPROPRIATED	**37,996**
Dividend	3,874
Retained earnings	34,122
TOTAL APPROPRIATED INCOME	**37,996**

The total proposed dividend to be paid to BNP Paribas SA shareholders is EUR 3,874 million, which corresponds to EUR 3.10 per share (with a par value of EUR 2.00) based on the number of existing shares at 31 December 2019.

6.3 BNP Paribas SA five-year financial summary

	2015	2016	2017	2018	2019
Financial position at year-end					
a) Share capital *(in euros)*	2,492,770,306	2,494,005,306	2,497,718,772	2,499,597,122	2,499,597,122
b) Number of shares in issue	1,246,385,153	1,247,002,653	1,248,859,386	1,249,798,561	1,249,798,561
c) Number of convertible bonds in issue	None	None	None	None	None
Results of operations for the year *(in millions of euros)*					
a) Total revenues, excluding VAT	28,160	32,458	27,707	33,333	40,100
b) Earnings before tax, depreciation, amortisation and impairment	7,323	10,153	3,003	4,631	7,611
c) Income tax expense	(74)	(278)	345	557	(325)
d) Profit after tax, depreciation, amortisation and impairment	6,232	9,266	3,157	5,027	7,490
e) Total dividend payout[1]	2,879	3,367	3,772	3,774	3,874
Earnings per share *in euros*					
a) Profit after tax, but before depreciation, amortisation and impairment	5.82	7.92	2.68	4.15	5.83
b) Profit after tax, depreciation, amortisation and impairment	5.00	7.43	2.53	4.02	5.99
c) Dividend per share[1]	2.31	2.70	3.02	3.02	3.10
Employee data					
a) Number of employees at year-end	49,751	51,498	53,078	54,299	53,880
b) Total payroll expense *(in millions of euros)*	4,288	4,263	4,441	4,208	4,797
c) Amounts paid in respect of employee benefits (social security, employee welfare, etc.) *(in millions of euros)*	1,404	1,599	1,577	1,604	1,535

(1) For 2019, subject to approval at the Annual General Meeting of 19 May 2020.

6.4 Main subsidiaries and associates of BNP Paribas SA

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue BNP Paribas	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue[**]	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros[*]				in%	
BNP Paribas SA (siren 662042449) is the parent company of all subsidiaries and associated companies												
I – Detailed information about subsidiaries and associated companies whose book value exceeds 1% of BNP Paribas SA's share capital												
1. Subsidiaries (more than 50% owned)												
Antin Participation 5 1 Boulevard Haussmann 75009 Paris France	433 891 678	EUR	194	3	7	8	194	3	7	8	100%	(1)
Austin Finance 3, rue d'Antin 75002 Paris France	485 260 640	EUR	799	139	0	0	799	139	0	0	100%	(1)
Banca Nazionale Del Lavoro SPA Viale Altiero Spinelli 30 00157 Rome Italy		EUR	2,077	3,270	177	2,394	2,077	3,270	177	2,394	100%	(1)
Banco BNPP Brasil SA 510 Av. Presidente Juscelino Kubitschek, 10° a 13° Andares, Itaim Bibi 04543-906 Sao Paulo Brazil		BRL	1,755	1,132	179	811	389	251	40	180	100%	(2)
BNP Paribas Bank Polska SA 10/16 ul. Kasprzaka 01-211 Warsaw Poland		PLN	147	10,047	631	4,449	35	2,361	148	1,046	65%	(2)
Bank BNPP Indonesia PT 35th Floor Menara BCA Grand Indonesia Jl M H Thamrin no. 1 10310 Jakarta Indonesia		IDR	3,852,573	1,597,089	264,312	919,591	248	103	17	59	99%	(2)
BNP PUK Holding Ltd 10 Harewood Avenue London NW1 6AA United Kingdom		GBP	40	1	10	12	47	1	11	14	100%	(2)
BNPP Asset Management Holding 1 Boulevard Haussmann 75009 Paris France	682 001 904	EUR	23	1,517	178	190	23	1,517	178	190	67%	(1)

(*) Converted at the rate of 31/12/2019.
(**) Pre-tax revenue for commercial entities and NBI for banking entities
(1) Non-audited social contributions data as at 31/12/2019.
(2) Data used in Group consolidated financial statements at 31/12/2019.
(3) Social contributions data as at 31/12/2018.

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue BNP Paribas	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in%	
BNPP Bank JSC 5 Lesnaya Street, Bld. B Business Center White Square Russian Federation 125047 Moscow		RUB	5,798	2,614	357	1,304	83	37	5	19	100%	(2)
BNPP Canada Corp 1981 Mc Gill College Avenue H3A 2W8 Montreal Canada		CAD	159	435	18	11	109	299	12	8	100%	(2)
BNPP Cardif 1 Boulevard Haussmann 75009 Paris France	382 983 922	EUR	150	1,445	1,597	749	150	1,445	1,597	749	100%	(1)
BNPP China Ltd 25/F Shanghai World Financial Center 100 Century Avenue Shanghai 200120 China		CNY	8,328	2,089	394	1,168	1,065	267	50	149	100%	(2)
BNPP Colombia Corporacion Financiera SA Carrera 8A no. 99-51 Edificio World Trade Center, Torre A, Piso 9 Bogota DC Colombia		COP	133,721	22,011	12,552	51,514	36	6	3	14	94%	(2)
BNPP Développement 20 Rue Chauchat 75009 Paris France	348 540 592	EUR	119	729	93	146	119	729	93	146	100%	(1)
BNPP El Djazair 8 Rue de Cirta Hydra 16035 Algiers Algeria		DZD	20,000	7,975	6,453	17,067	149	60	48	128	84%	(2)
BNPP Factor 46/52 Rue Arago 92 823 Puteaux France	775 675 069	EUR	6	31	26	112	6	31	26	112	100%	(2)
BNPP Factor Sociedade Financeira de Credito SA 3525 Avenida de Boavista Edificio Aviz 6ø 4100 Porto Portugal		EUR	13	67	4	10	13	67	4	10	64%	(2)
BNPP Fortis 3 Montagne du Parc/ Warandeberg 3 1000 Brussels Belgium		EUR	10,965	6,077	1,368	4,791	10,965	6,077	1,368	4,791	100%	(1)
BNPP Home Loan SFH 1 Boulevard Haussmann 75009 Paris France	454 084 211	EUR	285	1	1	2	285	1	1	2	100%	(1)

(*) Converted at the rate of 31/12/2019.
(**) Pre-tax revenue for commercial entities and NBI for banking entities
(1) Non-audited social contributions data as at 31/12/2019.
(2) Data used in Group consolidated financial statements at 31/12/2019.
(3) Social contributions data as at 31/12/2018.

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue BNP Paribas	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in%	
BNPP India Holding Private Ltd 1 North Avenue – BNP Paribas House Maker Maxity, Bandra – Kurla Complex Bandra (East) 400,051 Mumbai India		INR	2,608	108	501	787	33	1	6	10	100%	(2)
BNPP IRB Participations 1 Boulevard Haussmann 75009 Paris France	433 891 983	EUR	46	58	50	52	46	58	50	52	100%	(1)
BNPP Ireland Unlimited Co 5 George's Dock IFSC Dublin 1 Ireland		EUR	902	850	66	67	902	850	66	67	100%	(2)
BNPP Lease Group Leasing Solutions SPA 3 Piazza Lina Bo Bardi 20124 Milan Italy		EUR	65	(2)	1	17	65	(2)	1	17	74%	(2)
BNPP Malaysia Berhad Level 48, Vista Tower The Intermark 182 Jalan Tun Razak 50400 Kuala Lumpur Malaysia		MYR	650	79	64	151	142	17	14	33	100%	(2)
BNPP Personal Finance 1 Boulevard Haussmann 75009 Paris France	542 097 902	EUR	547	5,738	(236)	1 622	547	5,738	(236)	1,622	100%	(1)
BNPP Prime Brokerage International Ltd c/o Marsh Management Services (Dublin) Limited 25/28 Adelaide Road Dublin 2 Ireland		USD	0	698	36	169	0	622	32	150	100%	(2)
BNPP Public Sector SCF 1 Boulevard Haussmann 75009 Paris France	433 932 811	EUR	24	2	(10)	0	24	2	(10)	0	100%	(1)
BNPP Real Estate 167 Quai de la Bataille de Stalingrad 92867 Issy Les Moulineaux France	692 012 180	EUR	383	356	129	873	383	356	129	873	100%	(2)

(*) Converted at the rate of 31/12/2019.
(**) Pre-tax revenue for commercial entities and NBI for banking entities
(1) Non-audited social contributions data as at 31/12/2019.
(2) Data used in Group consolidated financial statements at 31/12/2019.
(3) Social contributions data as at 31/12/2018.

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue BNP Paribas	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in%	
BNPP Real Estate Investment Management Italy SPA Via Carlo Bo 11 20143 Milan Italy		EUR	10	20	(17)	2	10	20	(17)	2	100%	(2)
BNPP Réunion 1 Boulevard Haussmann 75009 Paris France	428 633 408	EUR	25	6	4	46	25	6	4	46	100%	(2)
BNPP SB Re 16 Rue Edward Steichen L - 2540 Luxembourg Luxembourg		EUR	250	140	12	17	250	140	12	17	100%	(2)
BNPP Securities Asia Ltd 59-63/F II International Finance Centre 8 Finance Street Central Hong Kong Hong Kong		HKD	2,599	(1,595)	(207)	310	298	(183)	(24)	36	100%	(2)
BNPP Securities Japan Ltd GranTokyo North Tower 1-9-1 Marunouchi, Chiyoda-ku 100-6740 Tokyo Japan		JPY	201,050	21,269	11,117	28,831	1,649	174	91	237	100%	(2)
BNPP Securities Korea Co Ltd 24, 25FL, State Tower Namsan, 100, Toegye-ro, Jung-gu Seoul 100-052 Rep. of Korea		KRW	250,000	5,824	868	19,556	193	4	1	15	100%	(2)
BNPP Securities Services 3 Rue d'Antin 75002 Paris France	552 108 011	EUR	183	667	185	1,921	183	667	185	1,921	95%	(1)
BNPP Suisse SA 2 Place de Hollande 1211 Geneva 11 Switzerland		CHF	320	1,673	28	423	295	1,541	26	390	100%	(2)
BNPP USA Inc 787 Seventh Avenue NY 10019 New York United States of America		USD	15,060	329	1,650	1,627	13,425	293	1,471	1,451	100%	(2)
BNPP VPG Master LLC 787 Seventh Avenue NY 10019 New York United States of America		USD	29	21	2	2	26	18	2	2	100%	(2)

(*) Converted at the rate of 31/12/2019.
(**) Pre-tax revenue for commercial entities and NBI for banking entities
(1) Non-audited social contributions data as at 31/12/2019.
(2) Data used in Group consolidated financial statements at 31/12/2019.
(3) Social contributions data as at 31/12/2018.

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue BNP Paribas	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in %	
BNPP Yatirimlar Holding AS Ankara caddesi, Büyük Kelkit Han no. 243, Kat 5 Sirkeci, Eminönü/ Fatih Istanbul Turkey		TRY	1,032	1	1	2	155	0	0	0	100%	(2)
Compagnie Financière Ottomane SA 44 Avenue JF Kennedy L - 1855 Luxembourg Luxembourg		EUR	9	463	5	5	9	463	5	5	97%	(2)
Financière des Italiens 41 Avenue de l'Opéra 75002 Paris France	422 994 954	EUR	412	(190)	(5)	0	412	(190)	(5)	0	100%	(1)
Financière des Paiements Électroniques 18 avenue Winston Churchill 94220 Charenton-le-Pont France	753 886 092	EUR	1	68	(3)	58	1	68	(3)	58	95%	(2)
Financière du Marché Saint-Honoré 37 Place du Marché Saint-Honoré 75001 Paris France	662 047 513	EUR	137	(5)	(16)	0	137	(5)	(16)	0	100%	(1)
Harewood Helena 1 Ltd 10 Harewood Avenue London NW1 6AA United Kingdom		USD	69	25	5	6	61	23	5	5	100%	(2)
Human Value Developers Private Ltd Beta Building 10th floor Lodha iThink Techno Campus, Kanjurmarg East Maharashtra 400042 Mumbai India		INR	2,346	(19)	0	0	29	0	0	0	100%	(2)
International Factors Italia SPA 15 Via Vittor Pisani 20124 Milan Italy		EUR	56	657	48	129	56	657	48	129	100%	(2)
Lion International Investments SA 30 Viale Altiero Spinelli 00157 Rome Italy		EUR	110	313	6	7	110	313	6	7	100%	(2)
Natiocredibail 12 rue du port 92000 Nanterre France	998 630 206	EUR	32	66	20	32	32	66	20	32	100%	(2)

(*) Converted at the rate of 31/12/2019.
(**) Pre-tax revenue for commercial entities and NBI for banking entities
(1) Non-audited social contributions data as at 31/12/2019.
(2) Data used in Group consolidated financial statements at 31/12/2019.
(3) Social contributions data as at 31/12/2018.

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue BNP Paribas	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in%	
Optichamps 41 Avenue de l'Opéra 75002 Paris France	428 634 695	EUR	411	(167)	(5)	0	411	(167)	(5)	0	100%	(1)
Parilease 41 Avenue de l'Opéra 75002 Paris France	339 320 392	EUR	129	253	(2)	(1)	129	253	(2)	(1)	100%	(2)
Participations Opéra 1 Boulevard Haussmann 75009 Paris France	451 489 785	EUR	410	(183)	0	0	410	(183)	0	0	100%	(1)
Portzamparc 1 Boulevard Haussmann 75009 Paris France	399 223 437	EUR	4	12	(1)	46	4	12	(1)	46	100%	(1)
Sagip 3 Montagne du Parc 1000 Brussels Belgium		EUR	657	3,286	17	22	657	3,286	17	22	100%	(2)
Sharekhan Ltd Beta Building 10th floor Lodha iThink Techno Campus, Kanjurmarg East Maharashtra 400042 Mumbai India		INR	587	14,909	215	4,880	7	186	3	61	73%	(2)
SNC Taitbout Participation 3 1 Boulevard Haussmann 75009 Paris France	433 912 250	EUR	792	(525)	(92)	0	792	(525)	(92)	0	100%	(1)
Société Orbaisienne de Participations 1 Boulevard Haussmann 75009 Paris France	428 753 479	EUR	311	(105)	0	0	311	(105)	0	0	100%	(1)
UCB Bail 2 12 rue du port 92000 Nanterre France	329 654 784	EUR	105	9	0	0	105	9	0	0	100%	(2)
UkrSibbank Public JSC 7 Andreevskaya Street 04070 Kiev Ukraine		UAH	5,069	(1,060)	2,487	6,329	191	(40)	94	238	60%	(2)

(*) Converted at the rate of 31/12/2019.
(**) Pre-tax revenue for commercial entities and NBI for banking entities
(1) Non-audited social contributions data as at 31/12/2019.
(2) Data used in Group consolidated financial statements at 31/12/2019.
(3) Social contributions data as at 31/12/2018.

Name	SIREN	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(**)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(**)	Percent of share capital held	Ref.
			In millions of foreign currency				in millions of euros(*)				in%	
2. Associated companies (10% to 50%-owned)												
Bank of Nanjing 50 Huaihai Road 210005 Nanjing China		CNY	8,482	59,495	11,188	27,406	1,085	7,609	1,431	3,505	15%	(3)
BGL BNPP 50 Avenue J.F. Kennedy 2951 Luxembourg Luxembourg		EUR	713	6,405	309	747	713	6,405	309	747	16%	(2)
Crédit Logement 50 Boulevard de Sébastopol 75003 Paris France	302 493 275	EUR	1,260	347	102	204	1,260	347	102	204	17%	(3)
Geojit BNP Paribas Financial Services Ltd (Group) 34/659-P Civil Line Road Padivattom Kochi 682024 Kerala India		INR	238	3,557	293	2,853	3	44	4	36	33%	(3)
Verner Investissements 95 Rue de la Boétie 75008 Paris France	388 271 298	EUR	15	324	25	0	15	324	25	0	50%	(2)
BNPP Leasing Solutions 16 rue Edward Steichen 2540 Luxembourg Luxembourg		EUR	1,815	363	166	182	1,815	363	166	182	50%	(2)

(*) Converted at the rate of 31/12/2019.
(**) Pre-tax revenue for commercial entities and NBI for banking entities
(1) Non-audited social contributions data as at 31/12/2019.
(2) Data used in Group consolidated financial statements at 31/12/2019.
(3) Social contributions data as at 31/12/2018.

In millions of euros	Subsidiaries		Associated companies	
	French	Foreign	French	Foreign
II – General information about all subsidiaries and associated companies				
Book value of shares				
Gross value	18,141	51,515	630	2,467
Carrying amount	17,207	44,810	620	2,315
Loans and advances given by BNP Paribas SA	44,673	24,161	136	627
Guarantees and endorsements given by BNP Paribas SA	35,253	8,961	0	18
Dividends received	2,828	3,127	56	184

6.5 Disclosures of investments of BNP Paribas SA in 2019 affecting at least 5% of share capital of french companies

Crossing threshold of more than 5% of the capital		
Unlisted	NOWCP	SA
Unlisted	LA PHOCÉENNE	SA
Unlisted	SENSECUBE SEED 1	SCP
Crossing threshold of more than 10% of the capital		
Unlisted	METRON	SAS
Crossing threshold of more than 20% of the capital		
None		
Crossing threshold of more than 33.33% of the capital		
None		
Crossing threshold of more than 50% of the capital		
None		
Crossing threshold of more than 66.66% of the capital		
None		

6.6 Statutory Auditors' report on the financial statements

Deloitte & Associés
6, place de la Pyramide
92908 Paris La Défense Cedex

PricewaterhouseCoopers Audit
63, rue de Villiers
92208 Neuilly-sur-Seine Cedex

Mazars
61, rue Henri Regnault
92400 Courbevoie

For the year ended 31 December 2019

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

BNP Paribas SA

16, boulevard des Italiens

75009 Paris

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying financial statements of BNP Paribas SA for the year ended 31 December 2019.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company at 31 December 2019 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Financial Statements Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us, for the period from 1 January 2019 to the date of our report, and, in particular, we did not provide any non-audit services prohibited by article 5(1) of Regulation (EU) No. 537/2014 or the French Code of Ethics (Code de déontologie) for Statutory Auditors.

Justification of assessments – Key audit matters

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code (Code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were the most significant in our audit of the financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the financial statements.

Identification and assessment of credit risk associated with customer operations

(See Notes 1, 2.f, 3.b and 3.k to the financial statements)

Description of risk	How our audit addressed this risk
As part of its banking intermediation activities, BNP Paribas is exposed to credit risk. It recognises impairment losses to cover known credit risks which are inherent to its operations. Impairment losses either take the form of individual impairment losses recognised against the related on- and off-balance sheet commitments or of collective impairment losses recognised against loan portfolios presenting similar risks which are not individually impaired. Collective provisions are determined using statistical models which require judgement at each stage of the calculation, particularly with respect to building similar portfolios and determining the inputs for the applicable risks and the obligating event of the provisions. Under certain circumstances, additional collective sectoral or geographic provisions are recognised in order to take into account any risks identified by BNP Paribas which are not covered by the above-mentioned individual or collective provisions. At 31 December 2019, operations with customers exposed to credit risk represented a total of EUR 501,899 million, while total impairment losses stood at EUR 5,965 million. We deemed the identification and assessment of credit risk to be a key audit matter because management is required to exercise judgement and make estimates to assess credit risk, in particular as regards credit granted to companies given the potentially material amounts of the outstandings of loans to corporate counterparties.	We assessed the relevance of BNP Paribas' control system and tested the manual and computerised controls for identifying and measuring impairment. We also examined the most significant outstandings and/or portfolios at the reporting date as well as on the credit granted to companies operating in more sensitive economic sectors or geographic regions. During our work, we focused on: ■ the rating of corporate counterparties: we examined the risk presented by significant counterparties and the correct application of the indicators used by the various business lines to measure credit risk, as well as the risk level of a sample of outstandings deemed to be performing by management; ■ measuring provisions recorded individually: we verified that a periodic review of the counterparties under surveillance had been carried out by BNP Paribas and, based on a sample, assessed the assumptions and data used by management to estimate impairment; ■ measuring collective provisions: assisted by our credit risk experts, we assessed the methods used by BNP Paribas across the various business lines, as well as the effectiveness of the data quality controls. In addition, we examined the disclosures in the notes to the financial statements with respect to credit risk.

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Valuation of financial instruments

(See Notes 1, 2.d, 3.c, 3.h, 3.i and 6.c to the financial statements)

Description of risk	How our audit addressed this risk
As part of its trading activities, BNP Paribas holds financial instruments (assets and liabilities) which are recognised in the balance sheet at market value. Market value is determined according to different approaches, depending on the type of instrument and its complexity: (i) using directly observable quoted prices; (ii) using valuation models whose main inputs are observable; and (iii) using valuation models whose main inputs are unobservable. The valuations obtained may be subject to additional value adjustments to take into account certain specific trading, liquidity or counterparty risks. The techniques adopted by management to measure these instruments may therefore involve significant judgement as regards the models and data used. At 31 December 2019, the market value of trading securities represented EUR 156,643 million, the bank's positive net position on firm transactions was valued at EUR 16,096 million and the market value of the bank's net long position on conditional transactions was valued at EUR 2,845 million. In light of the materiality of the outstandings and the judgement used to determine market value, we deemed the measurement of financial instruments to be a key audit matter, in particular the measurement of instruments requiring the use of unobservable inputs.	Assisted by our valuation experts, we verified that the key controls used by BNP Paribas with respect to the valuation of financial instruments function properly, in particular those relating to: ■ the approval and regular review by management of the risks of the valuation models; ■ the independent verification of the valuation inputs; ■ the determination of value adjustments. Based on a sample, our valuation experts: ■ analysed the relevance of the assumptions and inputs used; ■ analysed the results of the independent review of the inputs by BNP Paribas; ■ performed independent counter valuations using our own models. We also analysed, on a sample basis, any differences between the valuations obtained and collateral calls with counterparties. In addition, we examined the disclosures in the notes to the financial statements with respect to the valuation of financial instruments.

Measurement of equity investments, other equity securities held for long-term investment and investments in subsidiaries and affiliates

(See Notes 1, 3.c and 3.e to the financial statements)

Description of risk	How our audit addressed this risk
Equity investments, other equity securities held for long-term investment and investments in subsidiaries and affiliates are recognised on the balance sheet at a carrying amount of EUR 65 515 million. They are measured individually at the of lower cost or value in use. Value in use is determined, for each investment, using a valuation approach based on available information, including discounted future cash flows, net asset value and the related multiples commonly used to assess future yields. When their carrying amount exceeds value in use, an impairment loss is recognised for the difference. Given the materiality of investments in the balance sheet and the sensitivity of the models used to changes in the data and assumptions underlying the estimated values, we deemed the measurement of these investments to be a key audit matter.	Our audit work consisted in: ■ assessing, using sampling techniques, the justification for the valuation methods and data used by management to estimate values in use; ■ testing, using sampling techniques, the accuracy of the calculation of values in use used by the company. Lastly, we reviewed the disclosures on equity investments, other equity securities held for long-term investment and investments in subsidiaries and affiliates in the notes to the financial statements.

Analysis of legal risk with respect to regulatory and administrative investigations and to class actions
(See Notes 2.f and 3.k to the financial statements)

Description of risk	How our audit addressed this risk
In each of the countries where it is present, BNP Paribas is subject to the regulations applicable to the sectors in which it operates. If the Company does not comply with the applicable laws and regulations, it may be exposed to significant fines and other administrative and criminal sanctions. It may also incur losses as a result of private legal disputes in connection with or unrelated to these sanctions. Estimating provisions to cover the consequences of investigations into non-compliance with certain regulations requires judgement due to the difficulty in anticipating the outcome of regulatory procedures. Estimating provisions with respect to class actions or other private legal disputes also requires management to exercise judgement. In light of the increase in regulatory and administrative investigations and class actions brought against financial establishments in recent years and of the significant judgement exercised by management to estimate the amount of provisions recognised, we deemed this risk to be a key audit matter.	We familiarised ourselves with the procedure for identifying and assessing legal risk with respect to regulatory and administrative investigations and to class actions, in particular through quarterly interviews with BNP Paribas SA's legal functions. Our work consisted primarily in: ■ obtaining an understanding of the analyses prepared by the financial and legal departments at the end of each quarterly accounting period; ■ interviewing the specialised law firms with which BNP Paribas works when subject to legal disputes. We also examined the related disclosures provided in the notes to the financial statements.

General IT controls

Description of risk	How our audit addressed this risk
The reliability and security of IT systems plays a key role in the preparation of BNP Paribas SA's financial statements. We thus deemed the assessment of the general IT controls of the infrastructures and applications that contribute to the preparation of accounting and financial information to be a key audit matter. In particular, a system for controlling access rights to IT systems and authorisation levels based on employee profiles represents a key control for limiting the risk of inappropriate changes to application settings or underlying data.	For the main systems used to prepare accounting and financial information, assisted by our IT specialists, our work consisted primarily in: ■ obtaining an understanding of the systems, processes and controls which underpin accounting and financial data; ■ assessing the general IT controls (application and data access management, application changes/developments management and IT operations management) on key systems (in particular accounting, consolidation and automatic reconciliation applications); ■ examining the control for the authorisation of manual accounting entries; ■ performing additional audit procedures, where appropriate.

Specific verifications

In accordance with professional standards applicable in France, we have also performed the specific verifications required by French legal and regulatory provisions.

Information given in the management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Board of Directors' management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements, with the exception of the item described below.

Concerning the fair presentation and the consistency with the financial statements of the information about payment terms referred to in article D.441-4 of the French Commercial Code, we have the following matter to report: as indicated, these disclosures do not include banking and related transactions as the Company considers that such disclosures are not within the scope of the information to be provided.

Report on corporate governance

We attest that the section of the Board of Directors' report on corporate governance sets out the information required by articles L.225-37-3 and L.225-37-4 of the French Commercial Code.

Concerning the information given in accordance with the requirements of article L.225-37-3 of the French Commercial Code relating to remuneration and benefits paid or awarded to corporate officers and any other commitments made in their favour, we have verified its consistency with the financial statements or with the underlying information used to prepare these financial statements, and, where applicable, with the information obtained by the Company from companies controlling it or controlled by it. Based on this work, we attest to the accuracy and fair presentation of this information.

Concerning the information given in accordance with the requirements of article L.225-37-5 of the French Commercial Code relating to those items your Company has deemed liable to have an impact in the event of a takeover bid or exchange offer, we have verified its consistency with the underlying documents that were disclosed to us. Based on this work, we have no matters to report with regard to this information.

Other information

In accordance with French law, we have verified that the required information concerning the purchase of investments and controlling interests and the identity of the shareholders and holders of the voting rights has been properly disclosed in the management report.

Report on other legal and regulatory requirements

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of BNP Paribas SA by the Annual General Meetings held on 23 May 2006 for Deloitte & Associés, 26 May 1994 for PricewaterhouseCoopers Audit and 23 May 2000 for Mazars.

At 31 December 2019, Deloitte & Associés, PricewaterhouseCoopers Audit and Mazars were in the fourteenth, the twenty-sixth and the twentieth consecutive year of their engagement, respectively.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for preparing financial statements giving a true and fair view in accordance with French accounting principles, and for implementing the internal control procedures it deems necessary for the preparation of financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Financial Statements Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors of BNP Paribas SA.

Responsibilities of the Statutory Auditors relating to the audit of the financial statements

Objective and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions taken by users on the basis of these financial statements.

As specified in article L.823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgement throughout the audit. They also:

- identify and assess the risks of material misstatement in the financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the financial statements;
- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;
- evaluate the overall presentation of the financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Financial Statements Committee

We submit a report to the Financial Statements Committee which includes, in particular, a description of the scope of the audit and the audit programme implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Financial Statements Committee includes the risks of material misstatement that, in our professional judgement, were the most significant for the audit of the financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Financial Statements Committee with the declaration provided for in article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in articles L.822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Financial Statements Committee.

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Paris La Défense, Neuilly-sur-Seine and Courbevoie, 3 March 2020

The Statutory Auditors

Deloitte & Associés	**PricewaterhouseCoopers Audit**	**Mazars**
Laurence Dubois	Patrice Morot	Virginie Chauvin

7 A COMMITTED BANK: INFORMATION CONCERNING THE ECONOMIC, SOCIAL, CIVIC AND ENVIRONMENTAL RESPONSIBILITY OF BNP PARIBAS

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All the informations presented in chapter 7 of the Universal registration document has been collected by specific requests addressed to the functions, business lines or territories of BNP Paribas, or by the use of the Group's internal management tools. It is expressly noted when the scope covered by information differs from that of the entire BNP Paribas Group.

In the area of its economic, social, civic and environmental responsibility, BNP Paribas has distinguished itself through its many accomplishments and areas of progress in 2019:

- the Group has consolidated its position as a world CSR leader in the eyes of extra-financial rating agencies, with **scores considerably higher than the banking sector average**. Following its rating by RobecoSAM, BNP Paribas has been listed in the Europe and World Dow Jones Sustainability Indices, and was awarded FTSE Russell's highest rating of 5/5;
- the Group has also been recognised as the "**World's best bank for corporate responsibility 2019**" by the magazine Euromoney, while for the sixth year running, Corporate Knights has included it in its 2020 Classification of the "**Global 100 Most Sustainable Corporations**" (leading French bank and third bank worldwide);
- in New York, during Climate Week NYC 2019, the Bank signed up to the **Principles for Responsible Banking** alongside 130 banks wishing to align their strategies with the Sustainable Development Goals and the Paris Climate Agreement;
- the Group was involved in the preparation of the Women's Forum "**Charter for Engagement: Taking the Lead for Inclusion: Women Leading Climate Action**", which it signed in Kyoto in June ahead of the G20 summit. The charter aims to raise awareness about the link between women and the climate, and to help to develop more inclusive actions.
- in 2019, the Group made three major commitments to combating climate change and protecting biodiversity:
  - it has gone the extra mile in reducing its support for the highest greenhouse gas-emitting energy sources by announcing its decision reduce **financing of the coal industry** to zero from 2030 within the European Union and from 2040 in the rest of the world. The Bank had already stopped financing coal-fired power plants in 2017, as well as stakeholders whose main business was related to the unconventional hydrocarbons sector;
  - in parallel, BNP Paribas has continued its proactive strategy of **financing renewable energy**. It channelled EUR 15.9 billion into the sector in 2019, and increased its target amount to EUR 18 billion by the end of 2021;
  - the Group has made a public commitment **to protecting the oceans**, which hold a key role for humanity and are rapidly deteriorating. In order to play an active role in protecting marine biodiversity, BNP Paribas is shoring up its financing of sensitive sectors in line with SDG 14 "Life Below Water", by providing proactive support to initiatives for a sustainable economy which meet the needs of both marine ecosystems and humanity. One of the Group's main commitments is to contribute EUR 1 billion to the ecological transition of ships between now and 2025.
- in 2019, the Group played an active role in the areas of financial and social inclusion:
  - **BNP Paribas celebrated 30 years of microfinance initiatives**. More than 2 million people have been able to borrow microloans, indirectly with the support of BNP Paribas. Over the past 30 years, the Group has channelled EUR 900 million into 84 MFIs across 33 countries;
  - BNP Paribas also helped to launch ***L'Ascenseur*** (The elevator). This unique European location brings together around 20 stakeholders with the shared goal of improving access to education, jobs, sport and culture for youngsters from disadvantaged areas.
- regarding the Group's Human Resources policy:
  - BNP Paribas' actions "to promote workplace diversity" were welcomed by employees in the annual Global People Survey, with a 77% favourable opinion;
  - with employees declaring 1.5 million skills on the dedicated platform designed as part of its **2020 HR Strategy**, the Group can expect short and long-terms skills needs in the context of profound banking sector transformation;
  - the Bank also consolidated its **#1MillionHours2Help**, programme with a goal of achieving one million hours of skill-based volunteering work in 2020. By the end of 2019, more than 450,000 hours had already been completed.
- concerning **corporate purpose**, a text was prepared by the BNP Paribas Executive Committee, based on three texts resulting from our work with many different employees in recent years. These include: the Shared Convictions (Mission and Vision), the Code of conduct and the Engagement Manifesto. The Board of directors then carried out a thorough review of the BNP Paribas missions and objectives with Senior Management.

7.1 Our strategy

BNP PARIBAS' PURPOSE AND HOW SOCIAL AND ENVIRONMENTAL IMPACTS ARE TAKEN INTO ACCOUNT[(1)]

'We are at the service of our clients and the world we live in.

The BNP Paribas Group was formed by banks that have b een deeply embedded in the European and global economies over the last 200 years. They have adapted to the challenges of their times and helped clients and other stakeholders during moments of great change.

BNP Paribas' mission is to contribute to responsible and sustainable growth by financing the economy and advising clients according to the highest ethical standards.

We offer secure, sound and innovative financial solutions to individuals, professional clients, corporates and institutional investors while striving to address the fundamental challenges of today with regard to the environment, local development and social inclusion.

We are engaged with our clients to create a better future.

We are mobilising resources that have a positive impact.

At BNP Paribas, we want to be a long-term partner for our clients. We want to support their projects, manage their investments and savings, and through insurance protect people, their goods and property.

Our employees aim to deliver services that have purpose and relevance for clients and the world around them. They do this most clearly through their daily mission in the company but also through corporate volunteering.

We are working with stakeholders and have adopted social and environmental goals aligned with global standards such as the UN Sustainable Development Goals and those of the financial community such as the Principles for Responsible Banking and the Principles for Responsible Investment.

We ensure that ethics and our commitment to economic, social, civic and environmental responsibility are integrated into our business operations. This commitment is reflected in our organisation and the procedures and policies governing our activities.

We innovate in order to be a leader in sustainable finance.

We take action to support causes by bringing together financial solutions, stakeholder partnerships, employer and procurement initiatives, support for solidarity-based projects, philanthropy, volunteering and intrapreneurship programmes.

We are developing the tools to measure our environmental and social impact and we are focusing on actions that involve all employees.

BNP Paribas. The bank for a changing world.'

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(1) Summarising the following documents created with the input of hundreds of employees: Our Vision and Mission (2015), Code of Conduct (2016) and Engagement Manifesto (2018).

OUR CORPORATE SOCIAL RESPONSIBILITY STRATEGY (CSR)

Represented on the Group Executive Committee, the Company Engagement created in 2017 is tasked with:

- strengthening the CSR and diversity practices and bringing all the Company's levers together to meet major societal challenges;
- defining and implementing commitments concerning economic growth, expansion, environment and energy transition, social inclusion and local development, diversity and promotion of human rights.

The Group's CSR policy is one of the main components of this approach. In line with the United Nations' Sustainable Development Goals (SDGs), it is based on four pillars and 12 commitments that reflect its CSR challenges, as well as the Bank's concrete achievements. As part of a continuous improvement process, this strategy aims to build a more sustainable world while ensuring the Group's stability and performance. All of the Group's business lines, networks, subsidiaries and countries apply this policy, while adapting it to their specific characteristics.

A BANK COMMITTED TO A BETTER FUTURE

OUR 4 PILLARS

Our economic RESPONSIBILITY	Our social RESPONSIBILITY	Our civic RESPONSIBILITY	Our environmental RESPONSIBILITY
Financing the economy in an ethical manner	Developing and engaging our people responsibility	Being a positive agent for change	Accelerating the ecological and energy

OUR 12 COMMITMENTS

1 INVESTMENTS AND FINANCING WITH A POSITIVE IMPACT	4 PROMOTION OF DIVERSITY AND INCLUSION IN THE WORKPLACE	7 PRODUCTS AND SERVICES THAT ARE WIDELY ACCESSIBLE	10 ENABLING OUR CLIENTS TO TRANSITION TO A LOW-CARBON, RESPECTFUL OF THE ENVIRONMENT ECONOMY
2 ETHICS OF THE HIGHEST STANDARD	5 A GOOD PLACE TO WORK AND RESPONSIBLE EMPLOYMENT MANAGEMENT	8 COMBAT SOCIAL EXCLUSION AND SUPPORT HUMAN RIGHTS	11 REDUCE THE ENVIRONMENTAL IMPACT OF OUR OPERATIONS
3 SYSTEMATIC INTEGRATION AND MANAGEMENT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE RISKS	6 A LEARNING COMPANY SUPPORTING DYNAMIC PROFESSIONAL PATH MANAGEMENT	9 CORPORATE PHILANTHROPY POLICY FOCUSED ON THE ARTS, SOLIDARITY AND THE ENVIRONMENT	12 ADVANCE AWARENESS AND SHARING OF BEST ENVIRONMENTAL PRACTICES

Governance

- driven by a culture of responsibility and integrity,
- based on best practices,
- involving the Board of Directors, the shareholders, the management and the whole Group,
- to ensure a sustainable future for our business and deliver a positive impact on society.

CSR POLICY MANAGEMENT DASHBOARD

Pillar	Commitment	Indicator	2018	2019	2021 Objective
Our economic Responsibility	1 - Investments and financing with a positive impact	Amount of corporate financing contributing to the energy transition and to sectors considered as contributing directly to the achievement of UN SDGs	€168 billion	€180 billion	Increase by €10 billion per year in average over the 2019-2021 period
	2 - Ethics of the highest standard	Percentage of employees trained on ethics and conduct issues	96.2%	95.4%	Maintain more than 95% in 2021
Our social Responsibility	4 - Promotion of diversity and inclusion in the workplace	Percentage of women among the SMP population (Senior Management Position)	28%	29%	More than 31% in 2021
	5 - "Good place to work" and responsible employment management	Percentage of entities with more than 1,000 employees having taken a commitment as regards disability	91%	94%	100% in 2021
	6 - A learning company supporting dynamic professional path	Percentage of employees having been trained at least twice over the year	91.8%	94.8%	Maintain more than 90% in 2021
Our civic Responsibility	8 - Combat social exclusion and support human rights	Number of solidarity hours performed by the employees	305,000 hours	> 450,000 hours	1 million hours in 2021
	8 - Combat social exclusion and support human rights	Support (financing, investments on behalf of the bank and third parties) to associations and Social and Solidarity Economy enterprises	€5.6 billion	€6.2 billion	€6.3 billion in 2021
Our environmental Responsibility	10 - Enabling our clients to transition to a low-carbon, respectful of the environment economy	Financing for renewable energies	€15.4 billion(1)	€15.9 billion	€18 billion in 2021
	11 - Reduce the environmental impacts of our operations	Greenhouse gas emissions in teqCO_2/FTE (kWh buildings and business travel)	2.45 teqCO_2/FTE	2.32 teqCO_2/FTE	2.31 teqCO_2/FTE in 2021

(1) €14 billion on the more selective methodology applied from 2019.

Measuring the impact of the CSR strategy is a priority objective for BNP Paribas. Methodological work is carried out as part of a continuous improvement process.

BNP PARIBAS' PUBLIC POSITIONS

BNP Paribas' approach to corporate social responsibility (CSR) is framed by the thematic and sector-specific public positions it has adopted. With a presence in 71 countries, the Group carries out its operations in full respect for numerous commitments, working groups and platforms.

Universal principles

For many years, BNP Paribas' actions have followed the framework of:

- the United Nations Global Compact (Advanced level);
- the United Nations Women's Empowerment Principles.

The financial industry's CSR commitments

The Group actively participates in designing and implementing long-term social and environmental solutions within the framework of:

- the Equator Principles;
- the UNEP FI's Principles for positive impact finance;
- the Principles for Responsible Investment (PRI), for BNP Paribas Asset Management, BNP Paribas Real Estate Investment Management, BNP Paribas Cardif and BNP Paribas Securities Services.

Climate Week NYC 2019 saw the official launch of the **Principles for Responsible Banking**, founded in 2018 by around 30 banks including BNP Paribas. More than 130 banks signed the Principles, thereby committing to an alignment of their business strategies with the UN Sustainable Development Goals and the Paris Agreement (see *Investments and financing with a positive impact*, Commitment 1).

Commitments specific to the environment

Amongst BNP Paribas' environmental commitments:

- the Montréal Carbon Pledge;
- the Portfolio Decarbonisation Coalition;
- the Banking Environment Initiative (BEI) and its Soft Commodities Compact;
- the Institutional Investors Group on Climate Change;
- the Transition Pathway Initiative;
- the Roundtable on Sustainable Palm Oil (RSPO);
- the Science Based Target initiative;
- the Breakthrough Energy Coalition;
- the Task Force on Climate-related Financial Disclosures (TCFD);
- the Katowice Agreement;
- the Act4nature initiative;
- the Afep's commitments to the circular economy;
- Medef's Business Climate Pledge.

On 26 June, BNP Paribas signed the **Charter for Engagement: Taking the Lead for Inclusion: Women Leading Climate Action** alongside other members of the Women's Forum Women & Climate Daring Circle. The Charter has been presented to the Japanese Government, Heads of State and G20 member governments.

Another BNP Paribas flagship move in 2019 was to sign up to the **Collective Commitment to Climate Action**, thereby committing itself to aligning its loan portfolio to reflect and finance a low-carbon economy, and maintain global warming at a level considerably below 2°C, and closer to 1.5°C.

Commitments to a more inclusive society

BNP Paribas is also supporting other key initiatives which bring together both public and private international stakeholders.

In 2019, some 20 companies joined the ***Collectif des entreprises en faveur d'une économie plus inclusive en France*** (Business collective for a more inclusive economy in France), a voluntary initiative set up in December 2018 by a group of 13 companies, including BNP Paribas, looking to use their economic power for social and societal progress. This collective, which currently represents almost 1.4 million employees in more than 54,000 locations across France, is stepping up its commitments and actions, particularly in the area of employment. It is also leading the way with new thinking around procurement and access to more inclusive products and services.

Also in 2019, the Group became a founding member of **Business for Inclusive Growth** (B4IG), an OECD-supported initiative which was launched as part of the G7. The purpose of the Coalition is to transform the role of businesses within the economy in order to reduce inequality (see *Investments and financing with a positive impact*, Commitment 1).

Voluntary commitments defined by BNP Paribas

BNP Paribas has been committed for several years to going further in several sensitive sectors by setting itself additional obligations, through:

- the BNP Paribas commitments for the environment defining the Group's strategy concerning these challenges;
- financing and investment policies in the following sectors: agriculture, palm oil, defence, nuclear energy, paper pulp, coal energy, mining and non-conventional hydrocarbons;
- a list of excluded goods and activities such as tobacco, drift nets, the production of asbestos fibres, products containing PCBs, or the trading of any species regulated by the CITES convention (Convention on international trade in endangered species of wild fauna and flora) without the necessary authorisation;
- monitoring and exclusion lists grouping businesses which do not meet the Group's CSR requirements;
- a Statement of BNP Paribas on human rights;
- an Anti-Corruption Policy;
- a Charter for responsible representation with respect to the public authorities;
- a CSR Charter for BNP Paribas suppliers;
- The BNP Paribas Responsible Business Principles.

BNP Paribas used Climate Week NYC as an opportunity to take a formal **position in support of SDG 14: "Life Below Water"**. It also announced new measures to **protect the oceans** (see Helping to protect biodiversity and the oceans in *Enabling our clients to transition to a low-carbon economy respectful of the environment*, Commitment 10).

Think tanks

BNP Paribas is also a member of several think tanks on CSR issues, including:

- Entreprises Pour l'Environnement (EpE);
- the French Institute for Sustainable Development and International Relations (IDDRI);
- World Business Council for Sustainable Development (WBCSD);
- Businesses for Human Rights (Entreprises pour les Droits de l'Homme, EDH);
- the Thun Group;
- the French National Institute for Circular Economy (INEC).

PROGRESS ACKNOWLEDGED BY EXTRA-FINANCIAL RATING AGENCIES

The following table shows the most recent evaluations from the main extra-financial rating agencies and the inclusion of the BNP Paribas share in the related extra-financial indexes.

In 2019, the Group maintained or improved its performance in nearly all of its ratings, with scores which were generally far higher than the banking sector average.

Agency	Rating (year of most recent rating)	Rating (previous year)	Inclusion in the related indexes
Carbon Disclosure Project	A- (2019)	A- (2018)	
FTSE Russell	5/5 (2019)	4.6/5 (2018)	FTSE4Good Global Index Series
RobecoSAM	79/100 (2019)	78/100 (2018)	DJSI World – DJSI Europe
ISS (ESG Corporate Rating)	C+ (2019)	C (2018)	Prime (best-in-class status)
MSCI (ESG Corporate Rating)	A (2019)	A (2018)	
Sustainalytics (ESG Rating)	77/100 (2019)	79/100 (2018)	Global Compact 100 of the United Nations and STOXX Global ESG Leaders
Vigeo Eiris	70/100 (2019) No. 1 European bank in the ranking Solicited rating: A1+	70/100 (2018)	Euronext-Vigeo Eiris World 120, Eurozone 120, Europe 120 and France 20

In 2019, BNP Paribas' Moroccan bank BMCI was listed in Vigeo Eiris "**100 Best Emerging Market Performers Ranking**". It came second in the banking sector and third in all sectors combined.

The Group is also represented in extra-financial indices focusing on social performance, reflecting its commitment to gender equality, diversity and inclusion (see *Promotion of diversity and inclusion in the workplace*, Commitment 4).

On another note, the Group was awarded a rating of 68/100 (gold level) on **EcoVadis** extra-financial assessment. EcoVadis is a rating agency specialised in supply chain assessment. This result places the Group in the **top 2% of the most responsible suppliers in the world** based on the full EcoVadis rating universe.

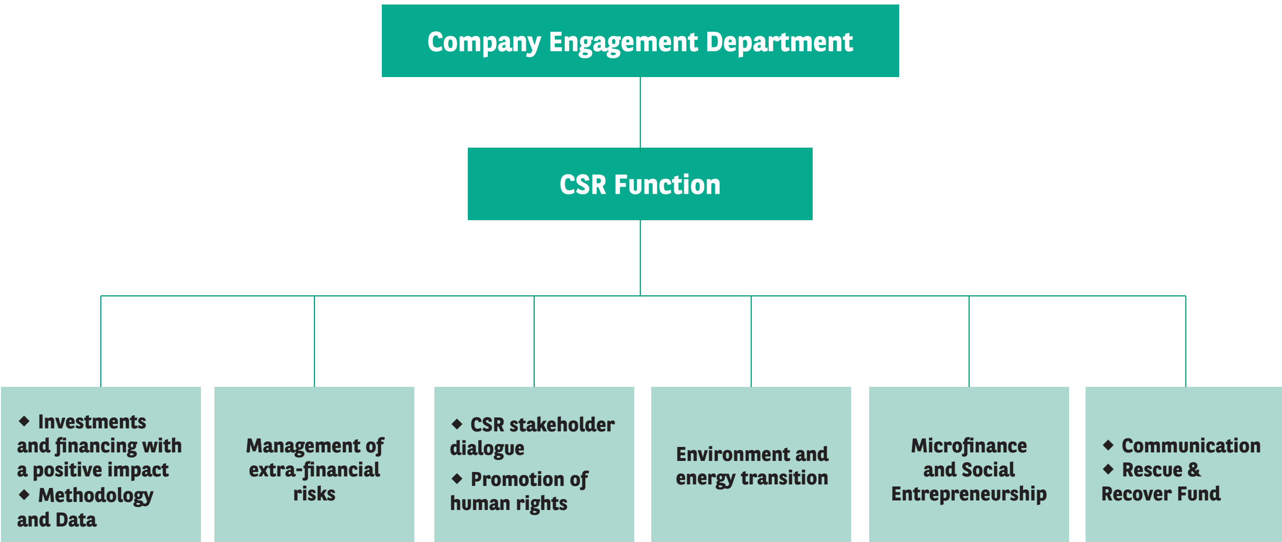
Likewise, other bodies and specialised magazines have acknowledged the Group's improved performance. Indeed, BNP Paribas:

- was awarded "**Most ESG Responsible International Bank Global 2019**" by Capital Finance International, recognising the Group's commitment to the energy transition and the Sustainable Development Goals;
- was listed as the first French bank and third worldwide in the 2020 "**100 Most Sustainable Corporations**" ranking of the Canadian magazine Corporate Knights, ranking in 31st position;
- was named "**2019 World's Best Bank for Sustainable Finance**" by Euromoney, a reference publication in international finance;
- received the **Global Performance Trophy**, awarded jointly by the Institute for Responsible Capitalism and Vigeo Eiris, which recognises the best Annual General Meeting in terms of comprehensibility and the relevance of financial and extra-financial information.

CSR TAKEN TO THE HIGHEST LEVEL IN THE ORGANISATION

Year after year, BNP Paribas is making progress in implementing its CSR policy, and this is thanks to the daily commitment of its 198,816 Full-Time Equivalent (FTE) with multiple CSR initiatives in their business lines at all levels of the organisation.

A dedicated department is responsible for managing the Bank's CSR commitments, reporting to the Company Engagement Department and represented in the Group Executive Committee. The assignments and responsibilities of the CSR Function are clearly defined in a directive from the Executive Management. At the Head Office, the CSR team is structured as follows:



It is based on a network created in 2012, which operates in the divisions, business lines, networks, departments and subsidiaries in order to facilitate the roll-out of the CSR policy across the whole Group. In total, over 130 people spend all or a majority of their time on CSR matters within BNP Paribas. They can also call upon the expertise of nearly 300 contributors on specific topics such as direct environmental impacts, microfinance and financing and investment policies. More generally, the Group's Executive Committee regularly decides on CSR topics and the Board of directors is given a presentation on the CSR strategy at least once a year. Finally, a member of the Executive Committee is responsible for CSR in each entity to ensure that CSR is integrated into the entity's strategy.

FOSTERING DIALOGUE WITH STAKEHOLDERS

Dialogue with stakeholders is at the heart of BNP Paribas' actions to promote social and environmental responsibility. This dialogue has a three-fold objective: anticipating change in our businesses developments and improving our products and services, optimising risk management, and finding innovative solutions which positively impact society.

- The steps to foster dialogue **with employees or staff representatives** are described in the social pillar of this document (see *Promotion of diversity and inclusion in the workplace,* Commitment 4, and *"Good place to work" and responsible management of employment,* Commitment 5). Employees may use the company's whistleblowing system (see *The whistleblowing system* in *Ethics of the highest standard*, Commitment 2).
- **Individual customers and small business clients** of all French Retail Banking entities have access to a complaint's procedure. Numerous entities provide their clients with the opportunity to use an independent ombudsman.
- In the framework of its asset management activities, **BNP Paribas Asset Management** engages with **companies in which the entity invests** on environmental, social and governance issues (ESG) in order to preserve, or even enhance, the medium and long-term value of the investments made on behalf of its clients. In 2019, discussions covered climate change and the energy transition, corporate governance, natural capital and human rights. BNP Paribas Asset Management supports the ESG commitments of these companies through its voting rights policy (see Inclusion of ESG criteria in assets under management, in *Systematic integration and management of Environmental, Social and Governance risks (ESG)*, Commitment 3). Moreover, in March 2019, as part of its Global Sustainability Strategy, BNP Paribas Asset Management developed a forward-looking vision based on **three topics (the 3Es): the Energy transition, Environmental protection, Equality and inclusive growth**. As well as providing a starting point for discussions, these topics form the pillars of the commitment made by companies.
- BNP Paribas regularly exchanges with its main **suppliers**, primarily through business reviews, information sessions and themed morning events. The Group provides its suppliers with a redress procedure in case of difficulties. In France, all suppliers may raise issues to an internal mediator within the Group. Independent from the Group Strategic Sourcing function, this mediator can be contacted (www.group.bnpparibas) as part of the commitments expressed in the Sustainable Sourcing Charter (contact available online at www.group.bnpparibas.com). Ten cases were referred to the internal mediator in 2019, all of them concerning payment terms.
- BNP Paribas presents its CSR strategy several times a year to **Socially Responsible Investing (SRI) investors** and regularly informs extra-financial analysts on this subject. In 2019, BNP Paribas met 37 different SRI investors at least once in France, the UK, Sweden and Norway.

- The Group has defined a policy and a management process for its relations with **advocacy NGOs**, in order to ensure a constructive, coordinated and productive dialogue with them. In 2019, BNP Paribas exchanged 83 separate times with advocacy NGOs .
- In order to better identify **civil society's** expectations when making its strategy evolve, BNP Paribas has developed a decision-making tool (the "Corporate Engagement Barometer") to guide its actions and anticipate future challenges. The initial study, led in partnership with Ipsos, targeted both the general and engagement sensibilized public in France, Belgium, Italy and Germany. The results were released in 2019.
- With regard to **regulatory organisations, governments and parliamentarians**, in November 2012, BNP Paribas adopted a "Charter for responsible representation with respect to the public authorities", which was approved in 2015 by the Board of directors. In 2017, BNP Paribas was registered in the digital register of lobbyists, managed by the Haute Autorité pour la Transparence de la Vie Publique (HATVP, High Authority for Transparency in Public Life). In February 2014, the Group signed the joint declaration on transparency in lobbying, introduced by Transparency International France. As a member of the Transparency International France Forum of Engaged Corporate clients, it also signed a joint declaration of companies on lobbying dated 22 May 2019, which renewed the commitments made in 2014 and extended the provisions of the Sapin 2 law on the representation of interests. The dedicated website of its Public Affairs France Department details its work in the area of responsible representation(1). The Group's public positions concerning banking and financial regulations are also available on its website(2).

The **mapping of our stakeholders** and the dialogue between BNP Paribas and each of them are detailed in the document "**How BNP Paribas listens to and takes into account the expectations of its stakeholders**", updated in 2019 and circulated to the Corporate Governance, Ethics, Nominations and CSR Committee (CGEN). This document is available in the CSR section of the Group's website(3). A **materiality matrix** presenting the most important issues for the Group's internal and external stakeholders is also available in section 7.7 *Extra-financial performance statement*.

(1) www.economieetentreprises.bnpparibas/fr/.

(2) https://group.bnpparibas/en/key-public-positions-banking-financial-regulation.

(3) https://group.bnpparibas/en/organizationgovernance.

7.2 Our economic responsibility: financing the economy in an ethical manner

BNP Paribas' primary mission is to meet its clients' needs, in particular by financing the projects of individual clients and businesses in an ethical manner, in order to drive economic development and create jobs. Given its leading positions in financial services in the 71 countries in which it operates, the Group's financing capacity and the way it conducts its business can have a direct impact on local economies. Aware of this economic responsibility, BNP Paribas bases its actions on its three commitments:

- **Commitment 1:** Investments and financing with a positive impact;
- **Commitment 2:** Ethics of the highest standard;
- **Commitment 3:** Systematic integration and management of environmental, social and governance risks.

2019 saw numerous tangible contributions promoting BNP Paribas' economic responsibility:

- in line with its strategy of speeding up the energy transition, in 2019, BNP Paribas decided to **completely stop its financing of the coal industry** by 2030 in European Union countries and by 2040 for the rest of the world. In 2017, BNP Paribas was also the first bank to announce that it was suspending its financing of companies which generate most of their income from unconventional oil and gas, a measure which today is still amongst the most advanced in the sector;
- BNP Paribas updated its **operational control plan for ESG risks** with new tools and processes, and completed training for all relevant employees;
- the Group and the European Investment Fund (EIF) launched the EUR 10 million "**BNP Paribas European Social Impact Bond Fund**", created and managed by BNP Paribas Asset Management. It develops social innovation and supports social enterprises, by enabling the two investors to simultaneously invest the same amounts into Social Impact Bonds (SIBs) structured by BNP Paribas in the European Union. It has already completed three investments;
- BGL BNP Paribas rolled out **"Act For Impact"** in Luxembourg, which supports entrepreneurs whose businesses have a strong positive impact on society. Thanks to the **"Act For Impact"** program BGL has continued the investments into an impact fund that helps an incubator for social start-ups;
- BNP Paribas joined **Business for Inclusive Growth (B4IG)**, a coalition launched by the OECD comprising around 30 multinationals. Its objective is to promote a more inclusive economy and business models to the benefit of society;
- in 2019, the **total support for Social Enterprises** (financing, own investments and third-party investments) amounted to EUR 1.9 billion worldwide, representing a growth of 14% compared to 2018;
- BNP Paribas entered into a partnership with the "**Grameen Creative Lab**", a company set up by Nobel Peace Prize winner Muhammad Yunus to promote the creation of social businesses (based on the definition put forward by Professor Yunus) and the development of products with a positive impact within the Bank.

COMMITMENT 1: INVESTMENTS AND FINANCING WITH A POSITIVE IMPACT

SUPPORTING SMES AND CONTRIBUTING TO MORE INCLUSIVE GROWTH

BNP Paribas has developed the necessary organisational system and has the tried and tested expertise required to contribute to the development of companies, SMEs in particular, which the Bank supports in an effective and efficient manner in its domestic markets and on the international stage. As a consequence, a wide range of products and services has been developed:

- French Retail Banking has deployed a **specific system dedicated** to SMEs and their senior management teams which covers 300 expertise centres. Its long-term commitment makes BNP Paribas a go-to bank for SMEs, with more than 80,000 small business and corporate clients;
- A new company called Portzamparc was created in September 2019 (following a merger between Portzamparc and B*capital), whose purpose is to provide better support to private clients, management companies and small and medium-sized companies wishing to invest in or raise financing from the stock market. it provides them with personalised support so that they can finance growth via the stock markets (IPO, capital increase, public offers, etc.).

Identifying models for more inclusive growth

In 2019, BNP Paribas partnered with 34 companies representing more than EUR 1 trillion in revenues within the Business for Inclusive Growth (B4IG) coalition partnering by the OECD. The coalition's aim of transforming the role of businesses in the economy is based on three pillars:

- improve equal opportunities and reduce inequalities, including those linked to location, gender or sexual orientation, for example;
- develop new and more inclusive business models;
- implement innovative financing systems which bring together businesses, philanthropic actors and public authorities.

CONTRIBUTING TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGS)

A CSR strategy aligned with the SDGs

The Group's CSR strategy fully contributes to achieving the UN's 17 SDGs that aim to build a sustainable future by 2030: ending poverty and hunger, promoting equality and building sustainable cities, whilst protecting the planet. It covers economic growth priorities, inclusion of vulnerable populations and preserving resources.

BNP Paribas contributes specifically to SDG 17 (partnership for the goals) through numerous partnerships between banks (see *United Nations' Principles for Responsible Banking*, Commitment 1) or covering environmental themes (see *Advance awareness and sharing of best environmental practices*, Commitment 12), or reducing inequality (see *Business for Inclusive Growth* in *Identifying models for more inclusive growth*), or PAFADD project to support women in agriculture and sustainable development (in *More inclusive growth models* in *Supporting female entrepreneurship*, Commitment 1).

United Nations' Principles for Responsible Banking

At Climate Week NYC 2019, BNP Paribas signed the "Principles for Responsible Banking" (PRB) alongside 130 banks from 46 countries.

Thanks to this coalition, which covers approximately one-third of worldwide banking assets, the SDGs and the Paris Agreement are at the heart of banking strategy for the first time.

The measures selected to meet PRB transparency challenges are listed in the table of concordance (see *Table of concordance with GRI, ISO 26000, Global Compact, Sustainable Development Goals, Principles for Responsible Banking and TCFD* in section 7.8).

Measuring our contribution to the SDGs

More generally, it is important for BNP Paribas to measure its contribution to the SDGs. At the end of 2019, total financing contributing to the energy transition and the SDGs was EUR 180 billion (compared with EUR 168 billion in 2018).

Economic sectors making a full contribution to the SDGs

Some business sectors are identified for their positive overall contribution to the SDGs such as, for example: community, social, education, health, agriculture, waste management, public transport and renewable energies. Among the financing that the Group supported:

- in the **agricultural** sector, a loan signed with Neumann will finance more than 100,000 coffee growers in 10 countries;
- in the **transport** sector, the Group's Senegalese subsidiary BICICIS has arranged and financed the new EUR 150 million tranche for the regional high-speed train (Train Express Régional (TER)) between Dakar and AIBD international airport;
- in the **waste management** sector, Republic of Ivory Coast subsidiary BICICI has channelled more than EUR 3 million into a vehicle fleet to collect household waste, which will vastly improve waste management in large towns;
- in terms of **access to housing**, we have provided GBP 50 million in financing to Optivo (with an option to increase to GBP 75 million). This social housing association manages 45,000 apartments and provides accommodation for nearly 90,000 people. The amount saved on interest on this loan will help 1,000 people to find a job.

Other activities are also considered as having a positive impact, such as Group support to microfinance (see *Products and services that are widely accessible*, Commitment 7), to social enterprises (see *Financing social entrepreneurship*, Commitment 1) to energy efficiency (see *Enabling our clients to transition to a low-carbon economy respectful of the environment*, Commitment 10) and also partnerships with international institutions. This methodology has been approved by extra-financial rating agency Vigeo Eiris.

Partnerships with development banks and institutions

Thanks to these partnerships which amounted to a total of EUR 850 million in 2019, **BNP Paribas provided specific support** to targeted client categories and sectors: SMEs (Tunisia), supporting exports, energy efficiency (Morocco, Poland), women entrepreneurs (Turkey, Morocco, etc.) and financing for greener maritime transport (partnership with the European Investment Bank).

Other financing with a strong positive impact

Ultimately, some transactions do not belong to any of these sectors, although they contribute to attaining the SDGs through their positive impacts. Amongst these transactions, Sustainability Linked Loans (SLL), formerly called Positive Impact Loans (PIL), make it possible to vary interest rates on the basis of the borrower's achievement of environmental and/or social objectives. BNP Paribas, which is one of the leaders in this sector, was ranked first in the world by Dealogic at the end of 2019. In total, BNP Paribas granted EUR 96.3 billion in SLLs in 2019, including **EUR 6.2 billion** directly underwritten by the Bank.

Some specific examples illustrate this approach:

- in March 2019, distribution company **Bunzl**, agreed a EUR 105 million loan whose margin is indexed to its CO_2 emissions reduction per million in revenues in EUR;
- in September 2019, **Sodexo** agreed a loan for EUR 1.3 billion which involves an adjustment to the cost of loan based on the company's performance in meeting its 50% waste reduction target by 2025.

Other innovative products are also being developed. Thus, BNP Paribas participated in the issuance by Italian leading power generator ENEL of a EUR 2.5 billion SDG-linked bond. The coupons on this bond are linked to the achievement of targets derived from the UN's SDGs: SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action).

Investment solutions which contribute to attaining the SDGs

To enable the savings of its individual customers and institutional clients to contribute to achieving the SDGs, the Group has developed a range of products and services:

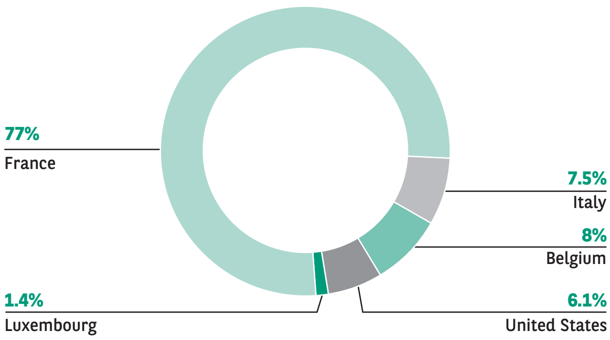
- **BNP Paribas Asset Management** has developed a tools to raise savers' awareness of the SDGs, including the "INSPIRATION[s]" a book which provides an overview of the SDGs[1];
- **BNP Paribas Wealth Management** uses the new MyImpact tool to help its customers navigate their investments and philanthropic actions towards the achievement of the SDGs. MyImpact uses an online questionnaire to identify customer preferences and guide them towards the products which best match their needs and values;
- the corporate and investment bank, **BNP Paribas Corporate and Institutional Banking**, has launched a range of responsible indices. Private investors and institutions can, therefore, identify companies that make a significant contribution to achieving the SDGs with regard to the products that they offer or their exemplary conduct. Since 2013, BNP Paribas has launched 23 ethical indices, five of which are closely linked to the SDGs, which have made it possible to raise over EUR 7 billion.

FINANCING SOCIAL ENTREPRENEURSHIP

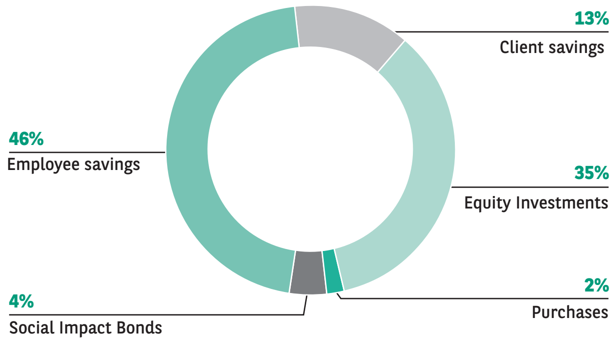
Thanks to their hybrid business models, social enterprises (SE) aim to generate a strong positive social or environmental impact, while seeking economic sustainability.

Continuous growth of financing and positive impact investments as well as the number of social enterprises supported by the Group

➤ FINANCING TO SOCIAL ENTERPRISES



➤ INVESTMENTS AND OTHER SUPPORT TO SOCIAL ENTERPRISES (IN ADDITION TO FINANCING)



The Group's commitment to supporting social entrepreneurship

In 2019, total support for social enterprises (financing, own investments and third-party investments) amounted to EUR 1.9 billion worldwide compared with EUR 1.6 billion at end-2018, representing a growth of 14% compared to 2018 and 5.5% at constant perimeter[2]. The Bank provides support in the form of banking and financing services to 2,500 social entreprises clients (including Microfinance Institutions and some companies Tech for Good).

Act for Impact, an evolving approach to supporting social enterprises

"Act for impact" was launched in France in 2018, and comprises a community of experts offering complete banking products, tailored non-banking services and support for managers of social enterprises, regardless of their geographical location, legal status or level of maturity.

The year 2019 highlighted:

- a EUR 1 million investment in the first "French Impact" labelled positive-impact seed-fund: MakeSense Seed, alongside the European Investment Fund and Banque des Territoires. Notably, this fund is attached to the MakeSense incubator which develops social start-ups;
- partnership with the High Commission for the Social and Solidarity Economy (SSE or "Third Sector"), primarily through participation in the working group dedicated to creating a favourable framework to develop Social Impact Bonds (Contrats à Impact Social – CIS) in France;
- the launch of Accelerate Business for Good in partnership with Les Échos. The aim of this unprecedented initiative is to promote companies which combine profitability with a positive regional impact. A total of five towns and cities and 700 participants joined forces to draft a white paper listing examples of socially responsible companies, alongside 18 proposals for a more responsible economy;
- active participation in the creation of the "Pact for Impact", a global coalition to develop the SSE, led by the French Government, with BNP Paribas as one of the main partners;
- the launch of "Act for Impact" in Luxembourg.

(1) https://indd.adobe.com/view/e6e3294d-b5c0-4e99-9436-48d95c4145b3.

(2) Excluding existing clients recently identified as social enterprises.

Support for social enterprises is also evolving in North Africa. In **Tunisia,** the UBCI and Lab'Ess (a major Tunisian social enterprise incubator) joined forces to hand out the social entrepreneur of the year Award (entrepreneur.e social.e de l'année) for the second year running. In **Morocco**, BMCI entered into a financing agreement with the Moroccan Entrepreneur Network (Réseau Entreprendre Maroc) to make MAD 1 million available to fund women entrepreneurs and social entreprises in Morocco.

Development of Social Impact Bonds, and the creation of BNP Paribas European Social Impact Bonds fund with the European Investment Fund

BNP Paribas continued to develop Social Impact Bonds (SIBs) as a structurer and investor. The Group co-structured three new SIBs launched in France in 2019 for a total of EUR 4.3 million, in which BNP Paribas invested EUR 1 million:

- The SIB launched with **Article 1** (co-structured with Citizen Capital) aims at reducing drop-out in a number of agricultural highschools and universities in Hauts-de-France and Occitanie and to improve the ambition of 1,130 scholarship students in technical education ;
- The "Family Relay" project with **Fondation Apprentis d'Auteuil** in Gironde (co-structured with Kois) aims to avoid placing 68 children in foster care, by offering housing and parental support to families in distressed situations. This EUR 2.8 million SIB mirrors the first Fondation d'Auteuil SIB rolled out in Loire Atlantique in 2018;
- The purpose of the **Solidarités Nouvelles face au Chômage (SNC) (new solidarity against unemployment)** SIB is to help the long-term unemployed people to reintegrate the workforce, based on an original two-step approach. Firstly, promoting and supporting the Accreditation of Prior Learning of durably unemployed people, with its partner VAE les 2 Rives, and secondly, providing dedicated support during the first few months of a professional reintegration to increase the chances of job retention.

These new projects bring to 9 the total number of SIBs launched between 2016 and 2019, structured by BNP Paribas in France and the United States, addressing a variety of social issues such as child protection, integration into the workplace and equal opportunities in education.

If these nine SIBs achieve their social impact then:

- more than 1,000 vulnerable people will have access to a stable occupation;
- more than 1,000 students will develop their ambition to continue their studies;
- more than 600 children will have avoided foster care.

Note that the Wimoov SIB, launched at the beginning of 2018, on inclusive and sustainable mobility as a key success prerequisite for job reintegration was successfully finalized in 2019, and exceeded its social performance objectives.

In order to accelerate the development of the European SIB market, BNP Paribas and the European Investment Fund (EIF) launched a EUR 10 million **BNP Paribas European Social Impact Bonds Fund** to co-invest in Social Impact Bonds ("SIB") in the European Union. To create and manage this innovative and unique mechanism, BNP Paribas has relied on its subsidiary BNP Paribas Asset Management. Wishing to build upon BNP Paribas' expertise in structuring SIBs, EIF has approached the Bank to set up this co-investment agreement. It enables both organizations to invest, together and for equal commitments, in SIBs structured by BNP Paribas within the European Union. Three SIB investments have already been funded through this new Fund, while several others are under study or structuring in France, Belgium and Italy.

BNP Paribas signs a five-year agreement with Grameen Creative Lab (founded by Nobel Peace Prize winner Mr Yunus)

BNP Paribas joined forces with the Grameen Creative Lab ("GCL"), a company founded by Nobel Peace Prize winner Muhammad Yunus, to promote social businesses (based on the definition put forward by Professor Yunus) and products which have a positive impact within the Bank. The objectives of this five-year agreement include the creation of new social businesses within the Bank itself, and creating a profound awareness of the employees so that positive impact will be embedded at the heart of their métiers. After supporting the first social business launched by the Bank in 2018 (ClimateSeed), in 2019 thanks to the Agreement signed, GCL accompanied 2 new "intrapreneurial" projects called Tilia[1] and Tangata[2].

DESIGNING AND PROMOTING SOCIALLY RESPONSIBLE INVESTMENT FUNDS (SRI)

As part of its Global Sustainability Strategy, BNP Paribas Asset Management continued to develop its range of responsible products and services for both individual customers and institutional investors. It uses its expertise to invest in sectors and companies which contribute to a sustainable economy, by investing in the energy transition, environmental compliance, equality and inclusive growth (see *Integrating ESG criteria into rigorous management of ESG risks*, Commitment 3). In 2019, major steps were taken to promote the quality of its SRI range (by topic and best-in-class labels).

(1) Tilia: https://info.tilia-aidants.fr/.

(2) Tangata: https://tangata.net/.

7

84 ESG/SRI labels were awarded in 2019

- BNP Paribas Asset Management was ranked No. 1 in France for SRI-labelled assets under management (20% of the EUR 138 billion of assets under management are labelled assets), and second by number of funds (with 34 funds out of 321).
- BNP Paribas Asset Management was also ranked No. 1 in Belgium by number of funds (80 funds out of 320) and by assets under management (EUR 54 billion labelled or 39% of total assets).

		France				Belgium
Funds		SRI label	Greenfin	Finansol	CIES	Towards Sustainability
Equities	44 certified funds	21			1	37
Bonds	19 certified funds	7	1	2	1	18
Diversified	32 certified funds	4		5	2	24
Money market	2 certified funds	2			1	1

- The **SRI label** was created in 2016 and supported by the French Ministry of Economy and Finance, to increase the visibility of SRI products to savers both in France and Europe-wide;
- The **Greenfin**, label was created by the French Ministry for the Ecological and Inclusive Transition, and endorses the green credentials of investment funds;
- **Finansol** identifies investments in the solidarity economy and microfinance;
- The **CIES** (Comité Intersyndical de l'Épargne Salariale – inter-union employee savings scheme committee) certifies the incorporation of ESG criteria into employee savings;
- in Belgium, the **Towards Sustainability** label, granted by Febelfin, aims to reassure potential investors that financial products are managed with sustainability in mind.

These labels confirm BNP Paribas Asset according to sound methodological standards Management's long-term commitment to develop and promote its range of SRI products.

A marked increase in inflows

BNP Paribas Wealth Management continued to roll out its SRI offering in particular by extending its sustainable product and service offering. **In 2019, SRI assets reached EUR 14.9 billion**, representing growth of 36% since 2011.

In Belgium, SRI development continued both in terms of labels (see above) and inflows. BNP Paribas Fortis is the Belgian SRI fund market leader with EUR 18 billion in assets under management and a market share of over 35%.

TAILORED ADVICE AND SUPPORT

Supporting female entrepreneurship:

274 million women worldwide manage their own company or are in the process of setting one up. For example, in France, only 4 in 10 company founders are women[1]. And yet, women play a major role in economic and social development, particularly in emerging countries.

The Group contributes through its entities to accelerate the growth of women-founded start-up and SMEs, through for example:

- long-standing actions carried for women entrepreneurs by French Retail Banking with a **budget of EUR 2 billion** dedicated to supporting their projects in 2019. In two years, more than 34,000 referrals have been made within the French entrepreneurial ecosystem, and loans of over EUR 3.2 billion have been put in place;
- the continuation of the "**Women in Business**" programme, which was developed in 2018 from a partnership between BMCI and the European Bank for Reconstruction and Development, which finances and supports Moroccan SME managed by women;
- the March 2019 Senegal launch of the Programme d'Appui aux Femmes dans l'Agriculture et le Développement Durable – PAFADD (**Programme to Support Women in Agriculture and Sustainable Development**), in conjunction with UN Women. This programme will enable 15,000 Senegalese women farmers to access financing, land and farming technology to improve their performance and independence.

Start-up and innovative companies

BNP Paribas is developing an ecosystem designed to promote the development and support of innovative companies. This support, particularly active in its Domestic Markets, comprises:

- 61 support hubs (the WAI, "We are Innovation") in France, including a specialist fintech hub, comprising employees dedicated to innovative enterprises;
- 5 start-up houses, in Belgium, Turkey, Italy, Luxembourg and France, where the teams co-create on a daily basis with fintech developers, digital operators and start-up;
- booster programmes putting start-up into contact with BNP Paribas' clients (medium-sized suppliers (ETI) or large corporates) for 6 months of co-innovation (WAI Boost);
- tailored products and services, particularly investments;
- in total in 2019, over 500 start-up have been supported by the BNP Paribas innovation hubs in France.

(1) source: INSEE

COMMITMENT 2: ETHICS OF THE HIGHEST STANDARD

The respect of the most rigorous ethical standards is a prerequisite at BNP Paribas. All Group employees are required to strictly respect all laws, rules and regulations in effect, as well as all professional standards that apply to their activities. In the event of conflict between the laws of a country and BNP Paribas' ethical rules, the Group's employees are required to respect local legislation while at the same time looking for ways to apply and respect internal ethical rules.

ETHICS OF THE HIGHEST STANDARD

Code of conduct

In May 2016, BNP Paribas published and distributed to all its employees its new Code of conduct supplemented in 2018 by a more specific section on anti-corruption. It is accessible to everyone on the Group's website[(1)]. Mandatory online training in the Code of conduct was delivered in 2016, and has continued since then for new hires.

The whistleblowing system

BNP Paribas has a dedicated internal ethics alert (whistleblowing) system, based on dedicated communications channels, available to employees on the intranet. Every employee has the right to report ethics violations without fear of punishment, dismissal or discrimination for the simple fact of having made use, in good faith, of this system.

The whistleblowing system is subject to continuous improvement measures. It was reviewed in 2018 to meet new regulatory standards (Sapin 2 Act, MiFID 2 and Duty of care) and to strengthen protection for the whistleblower: through a thematic memo sent to all employees, the communication of rules, and the creation of a dedicated forum for whistleblowing referents (employees tasked with the reception and processing of ethics alerts), in order to standardize the handling of these cases.

The fight against corruption and money laundering

In terms of financial security, as part of its transformation programme, the Group strengthened the Anti-Money Laundering/Combatting the Financing of Terrorism (AML/CFT) system by updating several key elements of its regulatory framework. The operational implementation of the new standards on transaction monitoring and the management of AML/CFT alerts defined in 2017 continued throughout the Group and had been completed by end of 2019 in most of the entities concerned.

The BNP Paribas corruption prevention and management system was overhauled following the publication of the so-called "Sapin 2" Act of 9 December 2016 on transparency, anti-corruption and modernising the economy. Governance has been consolidated through the increased role of points of contact in our business lines and functions. The corruption risk framework methodology has been revised to cover new processes (Know Your Supplier, lobbying and governance). Third-party due diligence policies have also been strengthened, the disciplinary process clarified and numerous awareness and communications measures launched to ensure that all parties are committed to combating corruption. Lastly, all employees have now completed awareness training on related risks.

Training

At end 2019, 94.4% of the 178,442 employees concerned had followed online training on international sanctions and embargoes, while 94.1% of the 167,569 employees concerned had received anti-money laundering and financing of terrorism training.

Regarding competition law, 94.5% of the Group's employees (not accounting for exempted individuals) passed the "Competition Law and You" training at the end of 2019.

Finally, in 2019 the Group relaunched the "Know Your Data" (KYD) training as part of the mandatory Compliance training programme. 91.3% of the 192,790 eligible employees completed this training. Moreover, 87% of employees from the European Economic Area completed their "Personal Data Protection" training in 2018. The training is due to be rolled out again in 2020.

The fight against tax evasion

The amount of taxes and duties due by the Group stood at EUR 5.9 billion in 2019, including EUR 2.5 billion in France.

Each year, the Group publishes a detailed report on its locations, showing all relevant data, country by country, including net banking income, headcount, results and taxes paid. It is clear from the data that the location of its offices is not driven by tax considerations, but guided in the interest of best serving its customers around the world. (see *Information on locations and businesses*, Chapter 8, section 6).

To this end, BNP Paribas ensures that its entities do not benefit unduly from privileged tax schemes. Moreover, the Group avoids locations in States or territories considered uncooperative by France or the official bodies of which France is a member (European Union, OECD).

Incidentally, the tax authorities around the world have all of the information they need to ensure that the Group is making its fair contribution to covering public expenses in every country in which it does business.

In addition, the Group pays close attention to customer compliance with tax laws. Thus, international private banking requires its non-resident customers to fill out a "tax compliance statement". More generally, the Group contributes to customer compliance with tax obligations due to its role of tax collector and provider of information to the tax authorities and to the taxpayers themselves.

(1) https://group.bnpparibas/uploads/file/codeofconduct_en_11_01_2018_40p.pdf.

PROTECTING CLIENTS' INTERESTS

Protecting clients' interests is a major concern for BNP Paribas. Therefore, the Group has chosen to place this issue at the heart of its Code of conduct and has set up a dedicated expert group within the Group Compliance teams. Protecting clients' interests is based in particular on the Code of conduct and the Clients' Interests Protection (CIP) policy which now also includes the management of client complaints.

A general Group-wide policy

The CIP policy covers the whole life cycle of products and services (from their design to sale) and the customer relationship. Employees (in particular in Front Office and Management) are continuously made aware in this area. The correct application of the policy is constantly checked by all internal control players, including permanent control, the control functions (Compliance and Legal) and the General Inspection.

The Group's CIP policy was updated in 2019 to improve its consistency and structure. It sets out organisation and conduct rules to be adhered to in order to identify and reduce risks of non-compliance with obligations to protect clients. These obligations are now based on five main areas:

- **organisation:** risk of non-compliance with rules of conduct due to an inappropriate management system;
- **product and service suitability:** risk of selling a product or service that does not meet clients' needs or situation;
- **information provided:** risk of misleading and/or unclear information being provided to clients, which prevents them from making an informed decision;
- **CIP-related conflicts of interests:** risk of not acting in the client's best interests by prioritising the interests of the Group, its employees, its partners or other clients;
- **managing client complaints:** preventing them from risk of complaints being processed incorrectly.

The commitments are translated into concrete practices deployed in all Group entities, depending on their specific characteristics:

- **dialogue with consumer associations** and other stakeholders is encouraged to gather their opinions on new ways to improve clients' interests protection;
- the **procedures for approving new products and services** incorporate all the issues relating to the protection of clients' interests, and ensure the compliance and added value of the product or service for target customers;
- the **structure of the commercial teams' remuneration** is also subject to qualitative criteria aimed at discouraging transactions that are contrary to the customer's interests. For French Retail Banking, for example, the teams' variable remuneration system is structured around four topics that express the employees' expected performance: quality of customer relationship, business development, management of risks and compliance management, and management (for the relevant employees). BNP Paribas Fortis in Belgium took five strategic decisions ("High 5 for Positive Banking") to be implemented by 2025. A share of the variable compensation is linked to several of this strategy's targets, one of which relates to customer satisfaction;
- **supporting vulnerable customers** and more generally combating exclusion play a key role in the values that BNP Paribas upholds through its day-to-day activities and responsible banking policies. In 2019, the CIP team (under the Compliance Function) launched a project to incorporate best practices into this particularly sensitive area. Retail Banking - France also implemented a specific offering and dedicated support for customers in financial difficulty (see *Products and services that are widely accessible*, Commitment 7);
- the Group is committed to being exemplary in the protection of customers' **personal data** (see Combat social exclusion and support human rights, Commitment 8);
- in 2019, the Compliance Functions' CIP team primarily focused on protecting clients' interests the consequences of algorithms use on the protection clients' interest. (through data automation). A working group was set up with the aim of improving identification and management of risks, both for managing complaints and conflicts of interests, and for information quality;
- employees are made **aware and trained** on a large scale about clients' interests. At the Group level, expert seminars for Compliance employees and others concerned by CIP are offered in all entities. At the same time, 88% of eligible trainees followed the MiFID II Awareness e-learning programme.

Complaints management and mediation

Complaints handling reveals areas for improvement and is a way to convert dissatisfied customers into ambassadors. As such, it is of prime importance to the Bank. It has been part of the Group's CIP policy since 2017.

Customer complaints statistics are reported to the CIP team on a quarterly basis (new complaints received during the period) and annually (new complaints received for which the subject described by the customer may lead us to consider a risk of non-compliance with the standards applicable to the entity). The management of complaints by the entities is also subject to specific monitoring with a dedicated control point.

Most of the Group's business lines have one or more services (online, phone, email, etc.) enabling customers to give feedback or make a complaint 24/7. These reactions are taken into account in the development of new products and to improve customer relations.

- in **Italy**, thanks to a process of continuous improvement, the percentage of customer complaints processed within the specified time limit reached 99% in 2019 (98% in 2018 and 81% in 2017). BNL banca commerciale (bc) also pursued its goal of reducing the amount of complaints received through cause analysis and corrective action plans set up. In this context, a dozen or so projects were launched in this area in 2019.
- in **Belgium**, complaints were down by 35% in 2019 in comparison with 2018, while the number of new files processed on time increased by 6%. This progress was the result of the implementation of best practices, in particular through more direct contact with customers (increase in phone contacts) when processing files.

- in **France**, there is a specific business line for processing customer complaints. There is a dedicated team and governance arrangements for the early identification and resolution of sources of customer dissatisfaction.

Many Group entities, such as BNP Paribas Personal Finance, BNP Paribas Cardif, Retail Banking networks in France, Belgium, Italy, Morocco, Algeria, Senegal, Mali, Ukraine, Poland and Turkey and the Arval subsidiary provide access to independent ombudsmen to whom clients can turn. In 2019, France had a dedicated independent banking ombudsman service, while in Italy and Belgium, clients can contact the national ombudsman services run by the relevant regulatory bodies in those countries.

Transparency and customer input into products and services

Helping to protect clients' interests, their understanding of banking products and the transparency of products and services are more than ever at the heart of the Group's concerns. The Group is even co-creating some of its products with future users:

- in Belgium, **BNP Paribas Fortis** organised over 70 "Customer Advice Committees" in 2019 for all customer segments, in order to gather their opinions. Over 350 customers took part in one or more of these sessions, alongside sales, marketing and operations experts.
- furthermore, in France, in order to enable customers who are deaf or hearing-impaired to access customer relationship centres (CRCs) independently and receive the information they need to monitor their savings plans, borrower's insurance or individual retirement cover, **BNP Paribas Cardif** is now offering a three-way meeting using video-conferencing tools whereby deaf or hearing-impaired customers can meet remotely with a sign language interpreter and a CRC adviser. In 2019, a pilot project was also rolled out to train French telephone operators on friendly communication with customers, particularly following major life events. The initiative was successful and will be extended in 2020.

Monitoring customer satisfaction

Customer satisfaction is crucial for adapting product and service offerings to demand, in order to always serve customer interests as best possible by analysing complaints and areas of notably, particularly on social networks. Thus, any evidence related to non-compliance with one or more CIP principles must:

- be recognised, categorised, registered, and processed (potentially through mediation);
- allow to identify risks and potential malfunctions, but also opportunities for improvement, as well as the opportunities for improvement, to be understood;
- lead to in the implementation of corrective measures for a closer match between expected and delivered.

In 2019, average customer satisfaction scores in the four Domestic Markets were:

- French Retail Banking: 7.51/10 (7.46 in 2018);
- BNL BNP Paribas bc: 8.1/10 (9/10 in 2018)(1);
- BNP Paribas BGL: 7.6/10 (7.4/10 in 2018);
- BNP Paribas Fortis: 7.1/10 (7.7 in 2018)(1).

Net Promoter Score (NPS)

Besides measuring satisfaction, the Group is focusing on ways to permanently improve word-of-mouth recommendations by its customers. Accordingly, the Net Promoter System has been deployed within the Retail Banking & Services entities by the Client & Employee Advocacy programme teams, and allows to collect customes and employees feedback throughout of listening to customers and employees throughout their relationship with the Bank and implementing the corrective actions required to improve their experience. In this context, the Net Promoter Score is the common indicator within BNP Paribas that measures how much the Company is recommended by customers and employees.

Launched in 2013, the Net Promoter System, is currently deployed in all Domestic Markets, in India and in for individual customers services within International Financial Services.

The Group's objective is to ensure that its entities improve their rankings year-on-year in comparison with their competitors in the countries in which they are based.

Achievements within Domestic Markets

- Banca Nazionale del Lavoro (BNL), Italian subsidiary, consolidated its position as the leading traditional bank for the 2nd year running.
- BNP Paribas Fortis Private Banking has become one of the most recommended private banks within its market for the first year.
- at the end of 2019, each entity knew its NPS ranking compared to its competitors for all business lines. The programme is now up and running in the Individual, Professional, Corporate and Wealth Management/Private Banking segments in France, Belgium, Italy, Luxembourg and Germany , in accordance with the deadline previously set.
- the NPS for priority individual customer processes is continually monitored for improvement. Considerable changes to the mortgage process have led, year-on-year, to a 5-point increase in France, a 9-point increase in Italy and a 10-point increase in Belgium. In France, the new client relationship process has been simplified and digitalised, leading to a 41-point increase in the NPS.
- over 1.4 million feedback comments have been collated, and clients with critical opinions are called back as a matter of priority. Customers' main areas of dissatisfaction are identified so that corrective actions can be implemented, including those in close proximity to customers though our branches or Business Centres.
- NPS awareness is delivered to all employees, regardless of their role. All employees and all managers working directly with customers have completed in-depth NPS training.

Achievements within International Financial Services (IFS)

- The NPS roll-out continued in International Retail Banking countries, including TEB BNP Paribas (Turkey), Bank of the West (US), BNP Paribas Bank Polska (Poland),, BMCI (Morocco) and UkrSibbank (Ukraine).
- NPS measurement systems and critical customer callbacks were boosted in the Retail, Wealth Management/Private Banking, Professional and Corporate segments.

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(1) There have been notable changes in methodology for 2019. BNP Paribas Fortis and BNL BNP Paribas bc now conduct surveys online rather than through telephone interviews.

- In 2019, BNP Paribas Personal Finance continued to roll out the Net Promoter System to its subsidiaries; the 3rd campaign benchmark was launched at 15 entities, 80% of which regularly measure NPS following client transactions.
- BNP Paribas Cardif has now deployed on-the-spot recommendation surveys in 25 out of 27 entities, and is making gradual additions to its system. In 2019, 10 entities exceeded the Cardif Forward 2022 objective (NPS > +50).
- Within BNP Paribas Wealth Management, the Net Promoter System has been extended to the majority of the sites.

ETHICS AT THE HEART OF SUPPLIER RELATIONS

Group purchases amount to around EUR 10.6 billion in expenditures globally.

BNP Paribas strives to develop **balanced relationships** with its suppliers. With this in mind, the Group has adopted a **Responsible Sourcing Charter** which sets out commitments directed to both the Group and its suppliers.

In addition, the Procurement teams abide by strict deontological principles, in order to manage strict Code of conduct in order to manage the risks of mutual dependency, adapt its practices to allow small and medium suppliers to compete in its call for tenders, small and medium suppliers, implement processes for faster payment of supplier invoices, and offer suppliers an appeal process through an internal ombudsman (see Fostering dialogue with stakeholders in *Our strategy*, section 7.1). In return, the Group expects its suppliers to run their businesses in accordance with strict environmental, social and governance criteria (see Integration of ESG criteria into supply chain management, in *Systematic integration and management of environmental, social and governance (ESG) risks*, Commitment 3).

In France, under its Diversity & Inclusion policy, the Group has taken multiple actions to foster procurement from suppliers working with vulnerable and disable employees (STPA). In 2019, BNP Paribas SA renewed its company-wide agreement on the integration of people with disabilities into the workplace for the fourth time. This agreement, which has been signed for a three-year term (2020-2022) with all trade unions and approved by the French Ministry of Labour, includes a EUR 1.8 million (excl. tax.) procurement target with STPA suppliers.

COMMITMENT 3: SYSTEMATIC INTEGRATION AND MANAGEMENT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE RISKS (ESG)

By financing and investing in industries with multiple Environmental, Social and Governance (ESG) issues, operating in countries whose legal and governance systems are not at the same level of maturity, BNP Paribas faces a wide variety of challenges that require increased vigilance when making financing and investment decisions. The appropriate management of ESG risks is of prime importance as it helps financial risks to be managed properly. The Group's ESG risk management system is part of an overall approach and is based on:

- the development of financing and investment policies to regulate activities in sectors with high ESG risks, such as coal-based electricity production;
- the creation of a list of excluded goods and business activities, such as tobacco;
- the publication of public positions which demonstrate the Bank's interest in issues that may pose environmental and social risks, such as ocean-related activities;
- the respect of the Equator Principles for major industrial and infrastructure projects;
- the development and use of tools to manage and monitor such risks (such as questionnaires for activities that have prominent risks), including a generic control plan;
- integration of the risk management stream, RISK, as the 2nd line of defence.

New environmental and social risk management tools were developed in 2019 to meet the French law on the Duty of care of parent companies and of companies using sub-contractors (See *Duty of care and Declaration on modern slavery and human trafficking*, section 7.6).

FINANCE AND INVESTMENT POLICIES GOVERNING THE GROUP'S ACTIVITY IN SECTORS WITH SIGNIFICANT ESG ISSUES

BNP Paribas strengthens its climate, transition and physical risk management system

Since 2011, BNP Paribas has contributed to speeding up the energy and green transitions, partly by combating climate change. In effect, the Group has an indirect impact on climate change through its corporate financing activities and must factor in climate-related risks. These consist of both physical risks (see *Managing physical risk*, Commitment 3) and transition risks, resulting from changes in the regulatory environment and public policies aimed at a low-carbon economy. The Group's actions thus help to mitigate these risks.

The Group tests numerous tools and methodologies used to best assess the exposure of its credit and investment portfolio to climate risks (both transitional and physical). As such, the Group:

- supports and implements the recommendations of the **Task Force on Climate-related Financial Disclosures (TCFD)**, and publishes information in line with these recommendations. In 2020, as previously, they will be summarised in the table of concordance (see Table of concordance with GRI, ISO 26000, Global Compact, Sustainable Development Goals, Principles for Responsible Banking and TCFD, section 7.8) and listed in a dedicated report;
- has also made a commitment to the **Science Based Target initiative** (SBTi). This coalition includes the Carbon Disclosure Project (CDP), the

United Nations Global Compact, the World Resources Institute (WRI) and the WWF, and supports companies willing to set environmental objectives that are in line with the Paris Agreement. As the SBTi has not yet determined any methodology to set objectives for financial sector companies, BNP Paribas is participating in the working groups set up to develop such a methodology;

- signed the **Katowice Commitment** in 2018, and the **Collective Commitment to Climate Action** in September 2019 under the auspices of UNEP FI. The Group has therefore committed to developing tools which will bring its credit portfolio into line with the objectives of the Paris Agreement.

As such, in 2019, BNP Paribas tested the methodology developed by the think tank, 2 Degrees Investing Initiative. This methodology calculates the profile of the credit portfolio at various maturity dates for five highly carbon-intensive sectors (fossil energy extraction, electricity generation, transportation, steel and cement). The method is adapted for each sector and the reference scenarios used are developed by independent organisations, such as the International Energy Agency (IEA). For electricity generation, fossil fuel extraction and automobiles, the approach is based on energy or technological mix. For aviation, cement and steel, carbon emission intensities are analysed.

Following this initial testing phase, work has been undertaken with the signatory banks of the Katowice Commitment, in order to test and propose areas for improvement to the common methodology developed by the "2 Degrees Investing Initiative". Indeed, BNP Paribas seeks to play an active role in the joint creation of a methodological tool which will later be widely shared with various stakeholders.

Initial testing of the methodology covered a significant percentage of clients in each sector (more than 80% of outstandings). The results of this test give an overview of the client portfolio with a reference scenario at a given date and an estimation of what this same portfolio will be in five years' time. The compatibility of the credit portfolio with a 2°C scenario will be achieved by dynamic portfolio management and exogenous technological developments. The purpose of the Group's work is to improve the percentage and quality of its client coverage, and to better understand the anticipated changes in each sector.

Finally, in December 2019, BNP Paribas signed the **Poseidon Principles**[(1)], which promote decarbonisation in the shipping industry by incorporating climate considerations into banking portfolios and credit decisions. The purpose of the Principles is to meet the ambition of the International Maritime Organization (IMO) to reduce shipping's greenhouse gas emissions by at least 50% by 2050, in comparison with 2008. They will provide the tools to measure and manage the CO_2 intensities of shipping financing portfolios based on a common methodology for all signatory banks.

Electricity and energy mixes financed have less carbon than the world mix

In accordance with its commitment to finance the energy sector in line with the 2°C scenario of the International Energy Agency (IEA), BNP Paribas has significantly reduced its support for fossil fuels: coal, unconventional oil and gas.

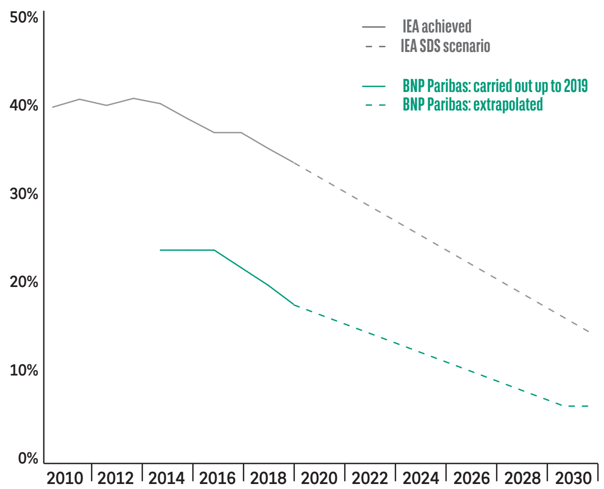
In 2018, the Bank therefore stopped supporting companies whose primary business is exploration, production and export of gas/oil from shale, oil from tar sands or gas/oil production in the Arctic.

418 companies worldwide were placed on the exclusion and monitoring list in 2019 because of the Group's sector-specific energy policies.

BNP Paribas toughened its stance on coal in 2019, announcing in November **its goal of reducing its exposure to the coal industry to zero** by 2030 in countries within the European Union and by 2040 for the rest of the world. In order to achieve this objective, the Bank will ramp up discussions with its corporate clients which produce some of their electricity from coal, analysing to what extent their development paths are aligned to the Group's objectives of withdrawing from the sector by geographical area. The Group will then start cutting ties with producers planning new coal-based electricity production capacity.

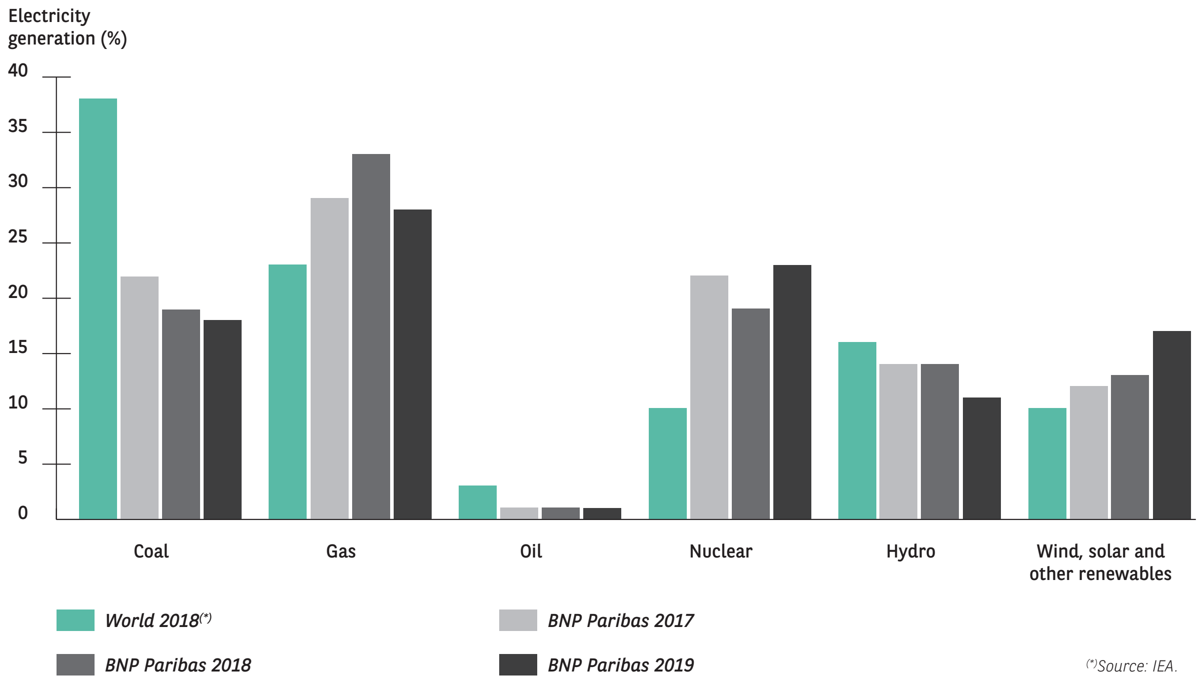
These decisions are naturally reflected in the electricity mix and the energy mix that the Group finances. In the context of measuring its indirect emissions (scope 3) BNP Paribas has since 2014 communicated the breakdown of primary energy mix (fossil fuel extraction) and secondary energy mix (electricity generation) financed and has committed to ensuring they evolve in line with the 2°C scenario of the IEA. By way of example, the coal share in the energy mix has been in continual decline since 2017.

➤ COAL SHARE IN THE ENERGY MIX



(1) https://www.poseidonprinciples.org/.

BNP PARIBAS' ELECTRICITY MIX

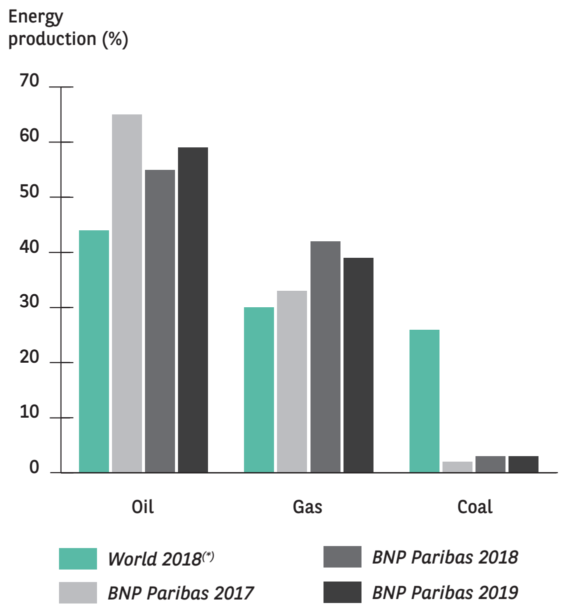


(*)Source: IEA.

With 46.7% fossil sources (gas, coal and oil) and 31% renewable sources (hydro, wind, solar and other renewables), the electricity mix financed by BNP Paribas in 2019 has a lower average carbon footprint than that of the world mix, which consisted of 64% fossil sources and 26% renewable sources in 2018. The kWh carbon content financed by the Group is 299g of CO_2, compared with the world average of 476g in 2018[(1)]

In line with the Paris Agreement, BNP Paribas is committed to reducing the kWh carbon content financed as rapidly as the world average is due to fall under the IEA SDS scenario (*i.e.* 81g of CO_2/kWh by 2040).

BNP PARIBAS' ENERGY MIX (PRIMARY ENERGY)



(*)Source: IEA.

Thanks to the implementation of its policy limiting the financing of coal extraction, the primary mix financed by BNP Paribas in 2019 had minimal exposure to this fossil energy (2.2%), which is the largest emitter of greenhouse gases.

(1) Source: International Energy Agency (IEA).

MEASURES TO COMBAT DEFORESTATION AND PROTECT BIODIVERSITY

BNP Paribas is committed to fighting deforestation and to protecting biodiversity through several sector-specific policies, its commitment to several multi-stakeholder initiatives and its global statement on the oceans.

In 2019, the Group strengthened its commitment to protecting both terrestrial and marine biodiversity:

- **Terrestrial biodiversity:** BNP Paribas strengthened dialogue with its clients to ensure that they adopt best practices in order to protect natural ecosystems and biodiversity.

In 2019, BNP Paribas focused primarily on its Brazilian clients, given the importance of both the **Amazon rainforest** and the **Cerrado** savannah regions to global biodiversity. Lengthy discussions were held with clients in these two regions, to confirm that all clients operating there are either already certified, or have begun the certification process. When it comes to beef for example, BNP Paribas bases its policies on the practices of the Global Roundtable for Sustainable Beef (GRSB)[1], a multilateral initiative to continually improve the sustainability of the beef value chain.

BNP Paribas also asks traders in agricultural commodities to develop traceability systems for the products that they sell.

In order to provide an incentive to its clients to adopt best practices, BNP Paribas offers new sustainable finance tools in which financing costs are index-linked to ESG performance. For example, in December 2019, Bunge took out a Sustainability Linked Loan linked to performance indicators to combat deforestation.

- **Marine biodiversity:** the Group published a **public statement on ocean protection** (see *Helping to protect biodiversity and the oceans*, in *Enabling our clients to transition to a low-carbon economy respectful of the environment*, Commitment 10). The Group also takes part in working groups with various different market stakeholders, including responsible practises in tuna fishing industry (Tuna Protection Alliance[2] with the Earthworm Foundation) and on reducing the environmental footprint of shipping (Green Marine Europe label Development Committee together with Surfrider Foundation Europe).

UPHOLDING THE EQUATOR PRINCIPLES ON PROJECT FINANCING

As a signatory to the Equator Principles along with 100 other financial institutions worldwide, and in its role as financial service provider and adviser, BNP Paribas works with its customers to identify, assess, and manage the environmental and social risks and impacts linked with major industrial and infrastructure projects. According to these principles, the negative impacts of these projects on communities, ecosystems or the climate must be avoided or minimised, mitigated and/or offset. Projects graded A present significant risks and systematically involve an external review; those graded B present more limited risks; and those graded C present minimal or no risks.

Since end-2017, under the initiative of BNP Paribas and nine other member banks, the Equator Principles Association has completed a targeted review of Principle 3 by focusing on key areas such as social impacts and human rights including Free Prior and Informed Consent, climate change, scope of application, designated countries and applicable standards. The updated version EP4[3] was approved and published in November 2019.

(1) http://grsbeef.org/.

(2) https://www.earthworm.org/our-work/projects/tuna-protection-alliance.

(3) https://equator-principles.com/wp-content/uploads/2019/11/The-Equator-Principles-November-2019.pdf.

PROJECTS SUBJECT TO THE EQUATOR PRINCIPLES

	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of transactions concerned in the year	30	13	21	26	17	23	8	17	8
Number of grade A transactions in the year	5	2	3	6	1	2	1	3	2
Number of grade B transactions in the year	20	10	13	18	15	21	7	14	6
Number of grade C transactions in the year	5	1	5	2	1	0	0	0	0

MANAGING PHYSICAL RISK

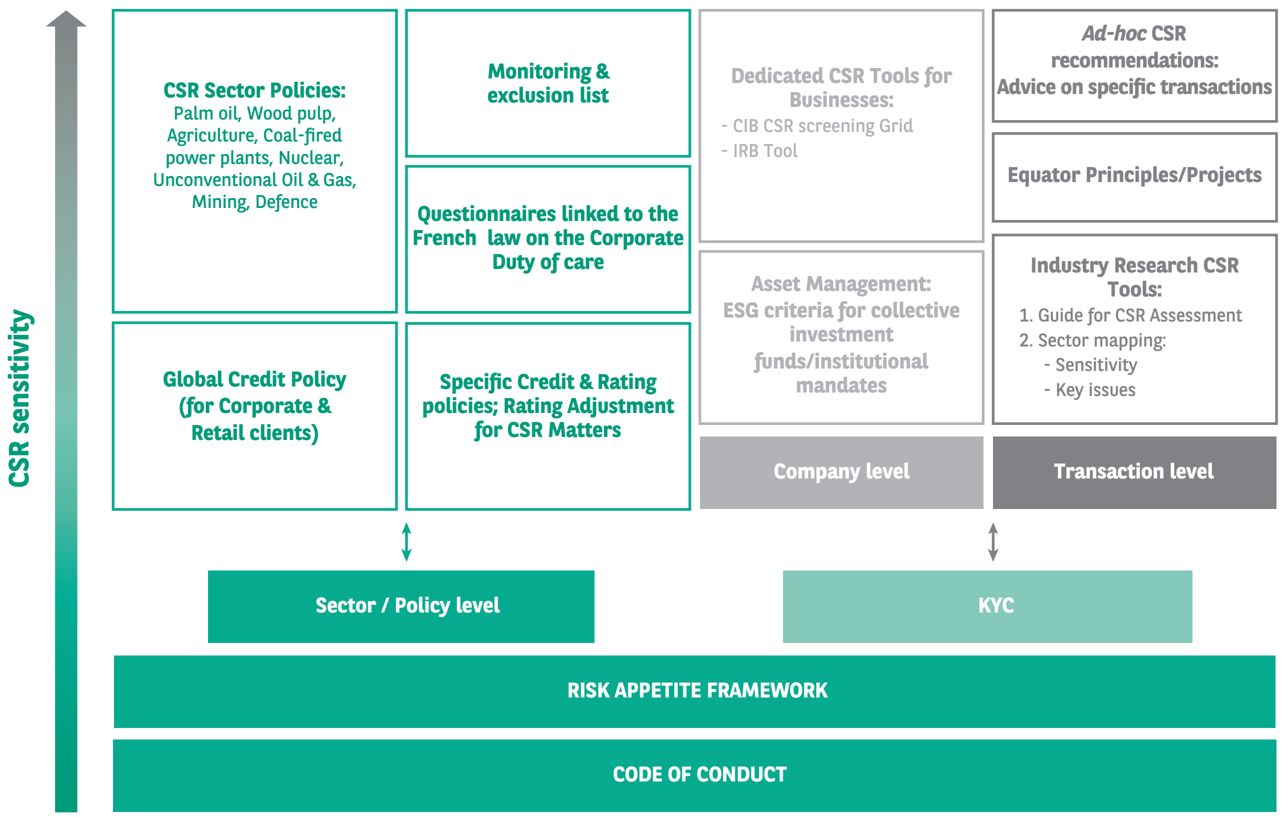
Physical risks cover climate change consequences (extreme weather events) on the assets of the Group's clients. They give rise to financial risks for companies due to the direct impact on their assets, as well as indirect impacts from their supply chains and markets. The final physical risk exposure score for each counterparty analysed is therefore based on three risk factors: operational risks, (upstream) supply chain risks and (downstream) market risks.

For the first time in 2019, BNP Paribas conducted an **assessment of the physical risks posed by a sample of clients in its portfolio**. The pilot study covered the nine industrial sectors which are the most exposed to physical risks. For each of these sectors it looked at the ten main clients in terms of credit exposure.

On a scale of 1 to 100, the overall score is 42, which is below average and therefore indicates a low risk profile. Unsurprisingly, the analysis identified disparities between the nine sectors in the studies. There were also disparities between global regions with greater vulnerabilities observed in South-East Asia and in North America. Finally, the level of exposure to physical risks varies based on the type of operational risk being analysed. The analysis shows that the sample group is particularly exposed to water and temperature stress, and to localised flooding.

A COMPREHENSIVE ESG RISK MANAGEMENT SYSTEM FOR PRODUCTS AND SERVICES PROVIDED BY THE GROUP

REINFORCEMENT OF THE GROUP'S ESG RISK MANAGEMENT SYSTEM



In keeping with its ESG risk management system, BNP Paribas takes into account ESG criteria in its decision-making process, and **strengthened its control of these risks in 2019**. As well as being incorporated into the Know Your Customer (KYC) framework, 22 specific credit and rating policies now include ESG criteria.

Moreover, pursuant to the French Law on Duty of care, analytical grids have been tested by business lines to provide an in-depth analysis of the Bank's corporate clients operating in countries and sectors identified as sensitive for human rights and the environment. These grids are an addition to the ESG risk management system already applied by the Bank (including sector-specific policies, CSR screening and specific credit policies). Environmentally and socially sensitive countries are identified based on frameworks which the Bank has developed (see *Duty of care*, section 7.6). Lastly, as a second line of defence, the Risk Function ensures that extra-financial issues are taken into account in credit decisions.

Finally, **throughout 2019 BNP Paribas has boosted training** on ESG risk management systems for the financing business lines and control functions (Risk and Compliance). In addition to e-learning modules on sector-specific policies available in eight languages, 12 interactive sessions were held to aid comprehension and the command of existing tools. These sessions incorporated methodology reminders and real-life examples. Training has also been delivered to 657 sales and risk employees (first and second lines of defence) in sessions led or jointly led by the Group CSR function. Since 2012, more than 46,600 employees have taken e-learning modules on the sectoral policies.

Integrating ESG criteria into assets under management

In March 2019, BNP Paribas Asset Management launched its "**Global Sustainability Strategy**", making sustainable development the cornerstone of its strategic and investment decisions. The definition of sustainable investment and its application to management processes is based on four pillars: ESG integration, engagement and dialogue ("stewardship"), exclusion and a long-term vision. BNP Paribas Asset Management's three-year roadmap sets targets for the energy transition, environmental protection, equality and inclusive growth.

In this context, BNP Paribas Asset Management also:

- announced the introduction of a new, stricter **carbon policy**, effective from 1 January 2020. This applies to all open funds actively managed by BNP Paribas Asset Management and will become the standard for dedicated mandates. BNP Paribas Asset Management has also committed to aligning its portfolios with the objectives of the Paris Agreement. It has therefore called on the European Union and other developed countries, states and cities to set a long-term target for reducing carbon emissions, with net zero emissions by 2050 at the latest, and by 2070 for emerging markets;
- published its public policy **engagement strategy**, which outlines its engagement priorities for advancing sustainable finance;
- made its flagship range of active funds**, BNP Paribas Funds, 100% sustainable**. All strategies in this range are now managed according to ESG criteria. The BNP Paribas Funds UCITS had EUR 53.5 billion in assets under management at the end of 2019.

To encourage ESG best practices in the firms in which the management company and its clients have invested, BNP Paribas Asset Management routinely exercises its shareholder voting rights, voting on 22,454 resolutions at 1,758 General Meetings this year. BNP Paribas Asset Management abstained from voting on or voted against around 27.7% of these resolutions. In line with its strategy on climate change, BNP Paribas Asset Management has adapted its voting policy and reserves the right to abstain from approving the financial statements, the discharge or the re-election of directors of companies that do not sufficiently communicate their CO_2 and 2°C strategy. In 2019, BNP Paribas Asset Management abstained 61 times at 16 General Meetings (compared with 16 abstentions in 12 companies in 2018).

BNP Paribas Asset Management has been a member of the Climate Action 100+ Initiative since 2017 and, as such, regularly engages in dialogue with firms ranked among the world's top 100 greenhouse gas emitters to improve their climate change governance.

BNP Paribas Cardif, the Group's insurance subsidiary, has significantly increased its socially responsible investments:

- in terms of investment and divestment decisions, ESG criteria were applied to 85% of the EUR 123 billion of assets under management in the general fund at the end of December 2019, compared with 80% at end-2018;
- worldwide, the SRI approach has grown significantly. At the end of 2019, the Group's Italian subsidiary had a total of EUR 838 million in green and social bonds (+52% in one year) to finance renewable energy, water management and responsible production projects.

Integration of ESG criteria into supply chain management

Within its sphere of operations, the Global Strategic Sourcing (GSS) business applies ESG criteria at several different levels.

First, through the deployment of an ESG risk map within the GSS team in 2019: this identifies purchasing categories that are at high risk for 13 types of ethical issues (corruption, data protection, etc.), environmental issues (pollution, biodiversity, greenhouse gases, etc.) and social issues (human rights, working conditions, discrimination, etc.).

Second, through the ESG supplier assessments carried out during selection: these assessments, which are based on ESG questionnaires (of which Purchases standards account for at least 5% of the score), include confirmation from the supplier that it adheres to the principles of the BNP Paribas Sustainable Sourcing Charter or the local equivalent. In 2019, BNP Paribas **signed up nearly 1,200 suppliers to this charter and carried out 2,500 ESG supplier assessments**, compared with 2,300 in 2018.

MANAGEMENT AND MONITORING TOOLS FOR ESG RISKS

Monitoring and exclusion lists

To identify the companies presenting the highest environmental and social risks, the Group defines and applies financing and investment policies and manages exclusion and monitoring lists in accordance with the level of identified ESG risks. At the end of 2019, these lists included 1,087 companies: 943 were excluded and 144 under monitoring. Whereas no business relationship whatsoever is allowed with a company on the exclusion list, the companies on the monitoring list are subject to Group measures intended to ensure that they permanently change their practices and reduce their ESG risks. Lastly, BNP Paribas has compiled an exclusion list that clearly mentions specific goods and activities that the Group is unwilling to finance, such as tobacco. These lists are periodically updated using data supplied by customers and external sources, and by analysing the key controversies involving corporate clients accused of serious violations of environmental standards or human rights.

Transactions handled by the Group's CSR teams

In 2019, the Group's CSR teams were asked to give an expert opinion in the assessment of ESG risks for 2,340 complex or sensitive transactions (financing, new accounts, export support, etc.) compared to 1,627 transactions the previous year.

Operational control plan

To ensure that ESG risk management tools are strictly applied in all entities and business lines, the Group has introduced a CSR operational control plan. This establishes the process of continuous improvement necessary for the effective management of ESG risks. In 2019, the Bank updated this control plan to incorporate the new ESG risk management policies defined by the Group to comply with the French law on corporate Duty of care. The CSR, RISK and Compliance Functions and the business lines are responsible for implementing the plan as part of the new governance put in place to establish first and second lines of defence for ESG risks within BNP Paribas.

7.3 Our social responsibility: developing and engaging our people responsibly(1)

In 2019, BNP Paribas combined inclusion with employee performance, recognition and commitment. Once again, the results of the internal survey, the GPS, showed improvement in the areas of diversity and inclusion, which is encouraging for the future. Employees acknowledge and endorse the Group's commitments and actions. The initial outcomes of the Global agreement (agreement on fundamental labour rights and the implementation of a social framework) have played a role in this, along with the new development offerings provided to employees as part of the HR 2020 transformation, which will soon be completed.

The Group is implementing its policies to meet the challenges of a responsible, sustainable bank through its three ambitious and proactive commitments:

- **Commitment 4:** Promotion of diversity and inclusion in the workplace;
- **Commitment 5:** "A good place to work" and responsible employment management;
- **Commitment 6:** A learning company supporting dynamic professional path management.

PROMOTION OF DIVERSITY AND INCLUSION IN THE WORKPLACE: EMPLOYEES ARE SEEING CONCRETE RESULTS

Fostering a humane and respectful workplace where all individuals are treated fairly is a powerful factor in engaging employees and a shield against risks of discrimination within the Group.

The fact that the Group's engagement survey, the GPS, received a higher response rate in 2019 (78%) than in 2018 (77%) testifies to the impact of the actions taken by the Group. Responses to the seven questions on Diversity & Inclusion continue to show improvement. More broadly, of the five items that showed the greatest improvement in the last 10 years, three relate to the promotion of diversity and inclusion.

Through the array of actions concerning diversity and inclusion that have been implemented, employees recognise the principles of the Group's social responsibility: "I have a clear vision of the actions taken to promote diversity..." **(76%, +2 points, +21 points compared to 2010)**; "The management of BNP Paribas promotes diversity in the workplace" **(77%, +1 point, +21 points compared to 2010)**.

THE HR 2020 TRANSFORMATION IS KEEPING ITS PROMISES

We have entered the home stretch for this strategic plan, which began in 2017 and aims first and foremost to identify skills and anticipate skills requirements in the short and medium term. It enables individual action plans to be defined that support all employees in their professional growth and give them greater long-term prospects, thus promoting employee engagement.

These goals are the rationale behind the design of the new HR platform, "**About Me**", now accessible to more than 85% of employees. About Me allows employees to self-assess their skills, build their own personal development plan with their manager and proactively receive personalised job and career development suggestions. In addition, the deployment of positive management, a key factor in managing change, is encouraged, including using continuous feedback, which simplifies the professional evaluation process.

(1) To monitor the proper implementation of the measures undertaken, particularly with respect to the three CSR social commitments and their objectives, Group Human Resources compile a social report to which Human Resources from entities in 67 countries contribute. This represents 96% of Full-Time Equivalent staff (FTEs) managed by the Group at 31 December 2019, hereinafter referred to as the "Social Reporting Headcount".

COMMITMENT 4: PROMOTION OF DIVERSITY AND INCLUSION IN THE WORKPLACE

Diversity and inclusion in the workplace continue to be promoted thanks to initiatives implemented across the whole Group in line with the challenges of the **Global agreement**.

A SOLID FRAMEWORK, A MULTI-ACTOR COMMITMENT

An effective and cross-functional governance of diversity and inclusion

The Group's Diversity and Inclusion Committee has 40 members and meets twice a year. Similar committees exist in the different business lines and countries. The manager in charge of Group diversity and inclusion reports to the Head of Human Resources and is a member of the Strategic Committee of the Company Engagement.

Numerous and active employee networks

Internal employee networks continue to grow and strengthen their key role in promoting diversity and inclusion, raising awareness, acting as a conduit for information and a source of innovation. In 2019, **over 25,000 employees from 49 countries** came together to talk about topics as varied as professional equality, sexual orientation, inter-generational harmony, parenting, origins, disability, inter-faith dialogue and veterans.

The unflagging commitment of the Executive Management extends throughout the Group

The Group is working to implement SDG 5 of the United Nations to achieve gender equality and empower all women and girls. In March 2018, Jean-Laurent Bonnafé became a **Thematic Champion of the "HeForShe" programme**. Within the organisation, he has committed to implementing concrete solutions to promote gender diversity in business lines that are often dominated by one gender, such as women in Human Resources and men in Global Markets. Outside the organisation, he has committed to supporting female entrepreneurs who are working to develop renewable energy solutions in Africa.

Promoting diversity and inclusion: a pillar of the "Global Deal" Global agreement

Built around the European agreement on gender equality in the workplace signed in September 2014, the measures promoting equal treatment during recruitment, training and professional development have been extended across all of the Group's business lines worldwide through the **Global agreement**.

COMMUNICATING, RAISING AWARENESS, TRAINING: MAINTAINING A CULTURE OF INCLUSION

Training, developing and mentoring

Awareness training and/or awareness-raising initiatives to promote diversity and fight discrimination are continuing in 64 countries representing more than 96% of the Social Reporting Headcount.

Some business lines are continuing to deploy their own programmes, such as **French Retail Banking** with the "**Treating all customers equally**" e-learning geared to all sales staff and their managers within the network.

In addition to training covering stereotypes and bias in many countries, the Group also rolled out a number of personal development programmes, including "**Active Inclusion**", "**#WomengotTalent**" and "**Women in Business**" to facilitate more inclusive professional paths opportunities in the Group. In 2019, new initiatives were launched, such as the Women's Impact Program in Germany, RISE in the United Kingdom and Boost Her Career in French Retail Banking.

Communicating and raising awareness among employees and managers

Lectures, screenings, roundtables, performances, exhibitions, podcasts etc.: during the **Diversity and Inclusion weeks**, events organised by Human Resources and the employee networks bring together thousands of employees across the world. In an effort to be more inclusive and to reach as many employees as possible, these awareness-raising actions make good use of digital technology, taking advantage of more accessible formats (e.g. podcasts) and offering live streaming and replays. This major event was also a springboard for a podcast series titled "In My Shoes", episodes of which are available on the Group intranet as well as on the Deezer and Spotify platforms; there were around 6,000 listens in 2019.

For the fourth consecutive year, BNP Paribas took part in the UN's **International Day for the Elimination of Violence Against Women** by issuing a worldwide press release.

OUTSTANDING INITIATIVES

Professional equality: developing and spotlighting women's careers

In 2019, confronting the challenges of reducing inequalities (UN Sustainable Development Goal 10), the Group makes professional equality a full-fledged part of its HR programmes and continues its efforts to make the business lines more balanced and to increase female representation in its governing bodies.

The Group is a longstanding partner of the **Women's Forum** and was elected to the strategic Committee in May 2018. In 2019, for the first time, BNP Paribas took part in all of the forum's events.

In France, a BNP Paribas collective, **Digital Ladies & Allies**, staged inter-generational "**Women & Girls in Tech**" events to encourage female employees and the girls in their immediate circle to learn about digital professions: coding workshops, the presentation of digital training programmes and an exhibition spotlighting female role models in the digital universe.

In December 2019, BNP Paribas signed the **#JamaisSansElles** charter: this includes all members of the BNP Paribas' Executive Committee committing individually to abstain from participating in juries or in public forums, roundtables or panels that have at least three participants without at least one of them being a woman. This step makes BNP Paribas **the first CAC 40 company, and the first company in the financial services industry**, to sign this charter and bring its entire Executive Committee together to back this cause.

BNP Paribas Wealth Management and the "**Women Initiative Foundation**" (WIF) organised the fifth "**Women Entrepreneur Program**" at the Stanford Graduate School of Business. 200 women have benefited from this program since its inception.

In the United Kingdom, CIB and BNP Paribas Personal Finance reported figures in line with the targets they set themselves when signing the "**Women in Finance Charter**" to increase the number of women in senior management positions (https://www.bnpparibas.co.uk/en/engagement/women-finance-charter/).

Promoting the employment and insertion of people with disabilities

➤ NUMBER OF EMPLOYEES RECOGNISED AS DISABLED(*)

	Disabled Employees			of which Hires		
	2017	2018	2019	2017	2018	2019
France	1,893	2,138	2,210	75	76	91
Belgium	71	71	74	0	01	3
Italy	868	859	905	11	11	14
Luxembourg	57	65	8	0	0	0
Europe (excluding Domestic Markets)	777	812	854	126	108	112
Rest of the world	148	159	186	33	55	90
TOTAL	**3,810**	**4,104**	**4,237**	**245**	**251**	**310**

(*) Physical headcount taking into account 96% of Group headcount (95% in 2018).

With the signature of the **Global agreement**, all Group entities must implement at least one of the 10 commitments of the International Labour Organisation Global Business and Disability Network Charter. To speed up the roll-out of this charter at the global level, a partnership agreement with Handicap International was signed on 20 March 2019 to help staff in each of the 71 countries strengthen their disability policies by 2021.

As of 31 December 2019, in the 60-some countries legally permitted to count employees with disabilities, there were 4,237 people in 34 countries, representing a total employment rate of 2.17% (slightly higher than 2018).

In France, during the final year of the 3rd disability agreement (2016–2019), BNP Paribas SA achieved its target, with 67 hires. Also 1,830 actions to keep staff employed were recorded in 2019. The employment rate of employees with disabilities increased to 4.64% (direct and indirect) compared to 4.37% in 2018. Nearly 135 awareness-raising and training actions were organised.

Overall, outcomes from the agreement have been positive, particularly on hiring, with 236 hires (the target was 200 over the four years of the agreement). The cumulative totals for the whole of the 3rd agreement are: 8,231 actions to keep people employed and 362 awareness-raising and training actions.

On 23 October 2019, BNP Paribas SA signed a fourth company agreement, which was authorised by DIRECCTE (Regional Directorate for Enterprises, Competition Policy, Consumer Affairs, Labour and Employment), renewing its commitments for four years.

In Italy, BNL is implementing the "Deaf Customer Service" initiative, which offers deaf and hard-of-hearing customers advisory services on banking products and services via a videoconference facility using sign language. The programme also includes a mobile app, Pedius, which deaf and hard-of-hearing people can use to make phone calls.

In Poland, BNP Paribas Bank Polska is a partner in the "Accessible ATMs" project, which is supported and sponsored by the National Bank of Poland and the Polish Ministry of Entrepreneurship and Technology.

Origins and internationalisation

173 different nationalities are present in the Group, with 11[1] of them represented in the G100.

The topic of origins is consistently addressed during the diversity and inclusion weeks. This year, for example, it was broached in a documentary titled *I Am Not Your Negro*, the podcast "(In)visibility of Origins in the Media" and an exhibition on African art. In the United States of America, events were held to mark Black History Month.

(1) Of French nationality.

LGBT+

In 2019, **three managers** in the Group are recognised on the 2019 lists of **OUTstanding** 100 LGBT+ Executives and 50 Ally Executives for their championing of the inclusion of LGBT+ people. For the third consecutive year, Jean-Laurent Bonnafé, Director and Group Chief Executive Officer, is in the top 10 of the OUTstanding 50 Ally Executives. In France, four employees, including Jean-Laurent Bonnafé, are named in the inaugural list of 60 LGBT+ leader role models and Allies produced by l'Autre Cercle.

BNP Paribas took part in the **International Day Against Homophobia on 17 May 2019** through conferences, performances, workshops and more. During **Pride Month**, the Group held a series of events in the United States of America to support the LGBT+ community and used testimonials to celebrate the diversity of its employees and customers.

A little later in the year, during the local diversity and inclusion week, the **17th Group Pride network** was launched in **Switzerland**. Lastly, in Poland, the branch network launched its "we are open to everyone" campaign. The campaign's logo bears the rainbow symbol associated with the LGBT+ movement.

Preventing and fighting all forms of violence more effectively

Since 2018, BNP Paribas is a member of **OneInThreeWomen** network, a European network of businesses committed to fighting violence against women. In 2019, the Group participated in the first inter-company European study seeking to identify and measure **the impact on businesses of domestic violence against employees**. In France, for a government forum on domestic violence, the Ministry of Labour sought out the input of the Group as a pioneering business in this area.

In 2018, BNP Paribas joined the **#StOpE** (Stop so-called Ordinary sexism in the workplace) initiative by signing an undertaking comprising eight principles.

The Group engages in a great number of initiatives **to combat sexism**. For instance, in 2019 BNP Paribas Personal Finance continued and concluded its anti-sexism campaign, "sexism laid bare", which was implemented internally and on social networks, through a number of awareness-raising actions such as the distribution of mugs, a theatre workshop with the top management and e-learning. In late March, this campaign won a silver trophy in the Corporate Engagement and Inclusion category of the Grand Prix for HR Creativity.

360° parenting and work-life balance

Because a good work-life balance is one component of professional **fulfilment**, the Group institutes many actions centred around **360° parenting**. On top of the "Family days" and "Kids days" organised around the world, BNP Paribas also organised for the seventh consecutive year a parenting week in France.

In Germany, "Parent-child offices" were opened to mitigate occasional childcare problems, and the "Eldercare" programme supports employees who are caregivers. BNP Paribas Personal Finance is teaming up with a specialised non-profit organisation to offer a coaching programme for employees who are caregivers in France. In the United Kingdom, the "New and Expectant Parents Programme" helps new and future parents, and at BNP Paribas Cardif, a co-development workshop is open to first-time parents.

Generations

For the fifth consecutive year, BNP Paribas was represented at the "**One Young World**" annual international summit for future leaders, with a delegation of 30 "**Emerging Leadership**" talents from 15 countries.

In France, the Group contributed to "**PaQte 2021**", an initiative of the French President, and pledged to offer at least 1,500 practical training seats to secondary school students in designated disadvantaged urban areas.

Promoting and complying with the International Labour Organisation fundamental conventions on Human Rights

BNP Paribas does not tolerate any form of slavery or human trafficking.

In its Code of conduct, the Group has, in particular, committed itself to promoting the respect for human rights in its sphere of influence and to treat in a dignified manner all employees, who owe each other mutual respect.

BNP Paribas carries out an annual review of countries that are high-risk in terms of human rights[(1)]. The Group operates in 2 high-risk countries, representing 0.002% of its total headcount, and in 28 countries in a worrying situation, representing 21% of its total headcount. In addition, 3 employees are identified as between the ages of 16 and 18 (1 in Brazil, 1 in the United States of America and 1 in the United Kingdom). The Group does not employ anyone under the age of 16. (see Combat social exclusion and support human rights: Commitment 8).

(1) Source: Verisk Maplecroft (Human Rights Risk Index) identified 23 high-risk countries and 90 countries that are a cause for concern (compared with 18 and 94 countries respectively in 2018). Out of the four categories of countries identified, high-risk countries are rated between 0 and 2.5/10 whilst countries in a worrying situation are rated between 2.5 and 5/10.

STRONG RESULTS

Regarding professional equality

The Group continues to increase gender equality among its key employees[(1)]. On 1 January 2019, a third woman, Marguerite Bérard, Head of French Retail Banking, was appointed to the Group Executive Committee.

Share of women		2018	2019	2020 Objective
Board of directors		6 women out of 14 members, including 1 elected by employees (41.7% according to the rules of the Copé-Zimmermann Law[(1)])	6 women out of 14 members, including 1 elected by employees (41.7% according to the rules of the Copé-Zimmermann Law[(1)])	-
Executive Committee		10.5% (2/19)	15% (3/20)	-
G100 (100 top executives)		27% with 39% of appointments during the 2014-2018 period	30% with 50% of appointments in 2019	-
Leadership for Change (Top 500)		25%	27%	25%
Senior Management Position[(2)]		28%	29%	30%
Talents - Leaders for Tomorrow	**Top**	36%	34%	30%
	Advanced	42%	43%	40%
	Emerging	47%	47%	50%

(1) This ratio is calculated by excluding the two directors representing employees on the Board.

(2) The Senior Management Position (SMP) or the Group's senior management is comprised of employees in 3,000 positions considered by the Executive Committees of all the Businesses/Operating Entities/Group functions as positions having the most important impact on the strategic, commercial, functional and skills plans.

External recognition

BNP Paribas continues to receive high scores for diversity and gender equality in 2019.

In France, BNP Paribas holds the **diversity and professional equality label**.

BNP Paribas also continues to be included in professional equality-specific indices such as the **Bloomberg Financial Services Gender Equality Index** (BFGEI) and the **Pax Ellevate Global Women's Index Fund**.

In 2019, BNP Paribas was ranked 26th on the **Thomson Reuters Global Diversity and Inclusion Index**, up from 28th place in 2018. It reached the 33rd place out of 100 on the **Equileap** index.

Finally, the NGO **Human Rights Campaign Foundation** gave it a score of 100/100 on its **Corporate Equality Index 2020**, of North American businesses that are most welcoming to and respectful of the LGBTQ population in the United States. With a total score of 79/100, BNP Paribas maintains its leading position in the annual **RobecoSAM** ranking (top 10%) even though the "Banking" sector average falls by 8 points. BNP Paribas is listed on the Dow Jones World and Europe Sustainability Indices.

In addition, the Group's diversity and inclusion actions are regularly recognised: in Brazil, UN Women rewarded BNP Paribas with a silver award for its policies and practices related to **WEPs – Women Empowerment Principles**. Corporate and Institutional Banking Portugal received the **Diversity label** awarded by the Portuguese Association for diversity and inclusion, mainly due to its corporate culture and the initiatives of its three internal employee networks.

7

(1) This information meets the Group's obligations under article L.225-37-4 6 of the French Commercial Code to report on how the company seeks to achieve gender equality on any Board committee set up to provide regular support for its corporate purpose and how far it achieves 10% diversity in posts of key responsibility.

COMMITMENT 5: A "GOOD PLACE TO WORK" AND RESPONSIBLE EMPLOYMENT MANAGEMENT

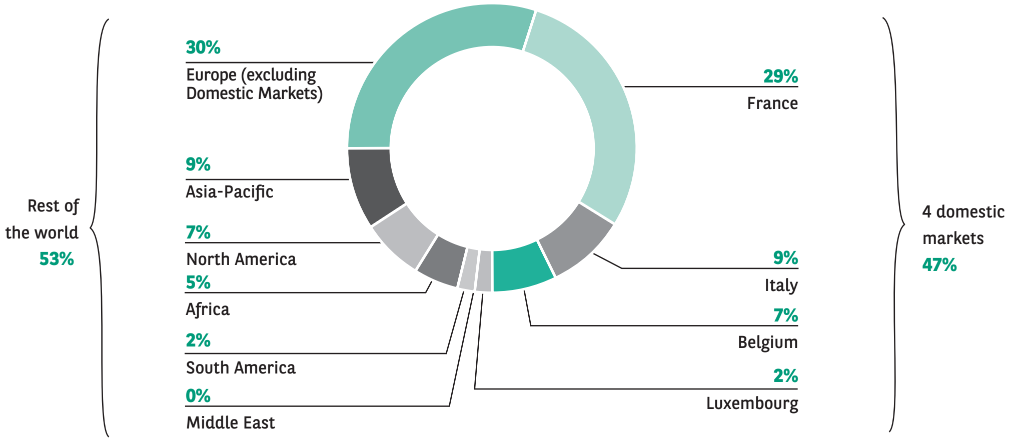
WORKFORCE EVOLUTION

At end of 2019, the number of employees managed by the Group is 198,816 FTE (Full-Time Equivalent – 194,001 financial FTE[1]), down from 2018 (202,624), in 71 countries.

➤ BREAKDOWN OF THE WORKFORCE BY BUSINESS LINE

(1) Financial headcount: Full-Time Equivalents (FTE) at 31 December 2019 in wholly controlled, fully consolidated entities.

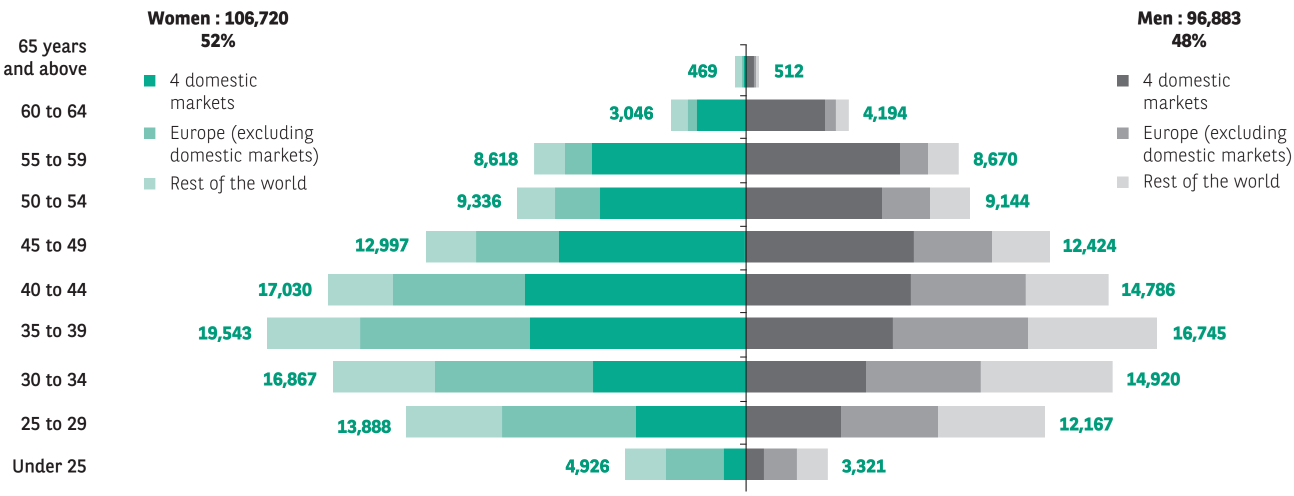
BREAKDOWN OF TOTAL WORKFORCE BY GEOGRAPHICAL AREA



CHANGE IN THE WORKFORCE OVER THE LAST 10 YEARS

	2009	2014	2019		
France	58,744	57,943	57,233	4 domestic markets 92,857	Europe 151,654
Italy	18,922	18,084	18,379		
Belgium	18,018	16,452	13,586		
Luxembourg	3,797	3,705	3,659		
Europe (excluding Domestic Markets)	54,464	51,128	58,797		
Asia-Pacific	10,818	11,167	18,676		Rest of the world 47,162
North America	14,984	14,985	13,995		
Africa	9,205	10,281	10,052		
South America	4,801	3,545	3,922		
Middle East	2,096	613	517		
TOTAL	**195,849**	**187,903**	**198,816**		**198,816**

BREAKDOWN OF GROUP WORKFORCE BY AGE, GENDER AND GEOGRAPHICAL AREA[(1)]



The overall average age increases from 40.7 years in 2018 to **41 years in 2019**, and average seniority also increases (11.4 to 11.6 years in 2019).

(1) Physical headcount (permanent + fixed-term contracts).

RECRUITMENT

In 2019, the Group recruited 20,972 people on permanent contracts worldwide (-22%), including 3,085 in France. Representing 62% of the hires in Europe (60% in 2018), BNP Paribas reaffirms its status as a leading European bank.

For the second consecutive year, France is the top recruiting country with 15%. The United States of America (13%) and India (12%) remains very active, followed by Portugal (7%).

The Group records a voluntary turnover rate(1) of 7.6% in 2019, mainly because of the high rates of voluntary departures in India (16%), the United States of America (15%), and Eastern European countries such as Poland, Ukraine, Romania and Bulgaria (15%), partly due to local employment trends in those markets. Outside those markets, the Group's voluntary departure rate was 5.4% (3.5% for France). At Group level, the turnover(2) was 11.5% (10.5% in 2018)

A framework created by the Group to offer a personalised recruitment and onboarding experience, backed by a new employer promise

The Group is continuing to expand its social media presence. It gains nearly 200,000 followers on **LinkedIn** in 2019 (a 35% increase from 2018) and is ranked **1 in the 2019 "Top Companies" ranking** in France (7th in 2018). This competition is beneficial for both candidates and Group employee pride.

BNP Paribas was awarded the **Top Employers Europe** certification for the 6th consecutive year in eight countries: Belgium, France, Italy, Poland, Turkey, Luxembourg, Germany and Ukraine. Employees appreciate the strong corporate culture, the support to develop their talents and the diverse range of professional paths.

A new employer promise to support candidate attractiveness and employee engagement

In a competitive job market and challenged by candidates who have high expectations of their employer, BNP Paribas, as part of its plan launched in 2017, implemented initiatives to strengthen its employer brand image and respond to the challenges of its HR 2020 strategy.

"Together, committed to building a better future"

The basic guiding principles of BNP Paribas' strategy are the following:

- **"a Sustainable & Responsible Global Leader"** – a major player in the financial services industry that is stable and committed to acting for the common good and to helping to change the world to create a better future;
- **"a learning company": BNP Paribas** has a long track record of investing heavily in training and working to facilitate employees' professional development;
- **"an open-minded group":** a group open to the world. This is demonstrated in the Group's strength in terms of diversity and inclusion. BNP Paribas was built naturally on the basis of its diversity. The never-ending search for innovation and discovery of new trends also illustrates this open-mindedness;
- lastly thanks to its transformation: "**The place to work differently**". The Group strives to build an organisation where people really do work differently, where collaboration succeeds, where the manager-employee relationship is grounded in trust, accountability and delegation, and where flexible work practices are developed.

CHANGES IN HEADCOUNT

➤ CHANGES IN HEADCOUNT: NEW RECRUITS ON PERMANENT CONTRACTS AND GEOGRAPHICAL DISTRIBUTION(1)

	Men	Women	2018 Total	Men	Women	2019 Total
TOTAL	**13,450**	**13,306**	**26,756**	**10,313**	**10,659**	**20,972**
Domestic Markets	52%	48%	5,971	51%	49%	4,444
Europe (excluding Domestic Markets)	44%	56%	9,938	43%	57%	8,469
Rest of the world	55%	45%	10,847	54%	46%	8,059
TOTAL	**50%**	**50%**	**26,756**	**49%**	**51%**	**20,972**

(1) Physical headcount (Total in FTE on permanent contracts = 20,465).

(1) Calculation method: [Resignations of employees and mutually agreed departures during the year N] [Headcount present at 31/12 in the year N-1 + Hires of employees during the year N] #– permanent contract and FTE employees only.

(2) Calculation method: [Employees definitevily leaving during the year N]/[Headcount present at 31/12 in the year N-1 + Hires of employees during the year N] – permanent contract and FTE employees only.

CHANGES IN HEADCOUNT: REASONS FOR EMPLOYEES WITH PERMANENT CONTRACTS LEAVING THE GROUP[1]

	Men	Women	2018 Total	Men	Women	2019 Total
Retirement/early retirement	1,206	1,184	2,390	1,759	1,241	3,000
Resignation	6,759	6,944	13,703	7,372	7,635	15,007
Dismissals[2]	1,002	1,081	2,083	1,052	1,069	2,121
Mutually agreed departures and equivalent	572	917	1,489	668	1,014	1,682
Assisted departure plans	400	371	771	770	887	1,657
Other terminations of permanent contracts (unspecified, end of trial period, death)	1,250	1,579	2,829	1,030	1,008	2,038
TOTAL	**11,189**	**12,076**	**23,265**	**12,651**	**12,854**	**25,505**

(1) *Physical headcount (Total in FTE on permanent contracts = 24,746).*
(2) *In France, the grounds for the 587 dismissals (567 in 2018) were professional failings, unsuitability and misconduct.*

28% of the departures are in Domestic Markets (stable), 37% in the rest of Europe (36% in 2018) and 35% in the rest of the world (36% in 2018).

ORGANISATION OF WORKING HOURS

TYPE OF CONTRACT[1]

	Men	Women	2018 Total	%	Men	Women	2019 Total	%
Number of permanent contracts	95,283	99,603	194,886	96%	93,306	98,303	191,610	96%
Number of fixed-term contracts	2,852	4,886	7,738	4%	2,714	4,492	7,206	4%
TOTAL	**98,135**	**104,489**	**202,624**	**100%**	**96,020**	**102,795**	**198,816**	**100%**

(1) *Full-Time Equivalent.*

PART-TIME[1]

	Men	Women	2018 Total	%	Men	Women	2019 Total	%
Number of part-time employees	2,746	15,287	18,033		2,561	14,862	17,423	
Of which part-time employees working 80% or more	1,457	10,076	11,533	64%	1,435	9,800	11,235	64%
% of part-time employees	3%	14%		9%	3%	14%		9%
% of part-time employees by gender	15%	85%			15%	85%		

(1) *Physical headcount taking into account 99% of Group headcount.*

QUALITY SOCIAL DIALOGUE

BNP Paribas encourages high quality social dialogue focuses particularly on change management and jobs. This social dialogue takes the form of negotiations with the employee representative bodies to establish collective agreements recording the social progress aspects negotiated and agreed. In 2019, in accordance with the planned schedule, priority is placed on Global agreement-related insertion measures and on drafting the list of baseline indicators for monitoring the agreement, in tandem with the joint oversight Committee, which includes representatives from the Group's executive management, the UNI Global Union and the Secretariat of the European Works Council.

Worldwide

The **Global agreement is continuing to be implemented**, helping to consolidate fundamental rights at work and establish a common social foundation for employees in all 71 countries. This agreement focuses on seven topics that continue improving the quality of life and working conditions of employees, and in doing so, help foster equality and inclusive growth. The commitments recorded in this agreement are due to be phased in for all Group employees, starting in 2019 for some measures and by 2021 for others. The monitoring of the indicators demonstrates that the agreement is being progressively implemented and will achieve the objectives by 2021. For example, in 2019, Bank of the West increased its **paid parental leave for the birth, adoption or foster care** placement of a child from six to ten weeks and is committed to increasing to 14 weeks starting from 1 January 2020. Furthermore, just over 93% of the workforce[1] is entitled to take at least 14 weeks of paid maternity leave. The six days of paid paternity leave cover 73% of the workforce[1]. Lastly, regarding disability, 94% of entities with more than 1,000 employees have implemented at least one of the 10 commitments of the International Labour Organization Global Business and Disability Network Charter.

(1) *Covering 94% of the Group's FTE workforce.*

In Europe

At the end of 2019, the European Works Council(1) covers **22 countries** and more than **68%** of the total workforce.

At the 2019 plenary sessions of the European Works Council, there was follow-up on the European agreements on gender equality and discussion about stress prevention.

In France, negotiations culminated in the signature of **147** collective agreements, almost one-third of which addressed compensation and/or employee savings and/or retirement protection insurance, and nearly one-third of which covered social dialogue and included the establishment of the new Social and Economic Committee.

A forum for discussion and collective agreements

➤ NUMBER OF COLLECTIVE AGREEMENTS SIGNED AND OFFICIAL MEETINGS

	Collective agreements		Number of formal meetings
	2018	2019	2019
France	114	147	1,358
Belgium	7	16	212
Italy	48	41	224
Luxembourg	0	0	13
Europe (excluding Domestic Markets)	94	92	490
Rest of the world	24	14	127
TOTAL	**287**	**310**	**2,424**

Employment management

BNP Paribas practices responsible employment management by anticipating changes in order to mitigate their effects on jobs. It is carried out at all levels and through dialogue with managers and employee representative bodies. Whether it is at a global level, with the **Global agreement** signed in 2018, at a European level, with the **2012 Agreement on Employment** that is still in force, or at a French level, with the **Employment and professional paths Management Agreement (GEPP)**, all the agreements share three areas of focus: prioritising, voluntary solutions such as managing natural wastage in the context of major projects that impact jobs, strengthening internal mobility and enhancing employees' employability through the HR 2020 strategy, against the backdrop of a profound transformation of the banking industry. Accordingly, in France, internal mobility and natural attrition have enabled the Group to manage its workforce, and at the same time, the BNP Paribas Asset Management subsidiary is initiating a voluntary departure plan pertaining to 143 positions that will extend from early 2020 to February 2021.

LISTENING TO EMPLOYEES THROUGH THE GLOBAL PEOPLE SURVEY

The Group engagement survey had a record number of respondents in 2019: 78% compared to 77% in 2018 (up 7 points from 2015 and up 26 points compared to 2010), and it collected 223,576 answers to open-ended questions. This year, more than 8,500 reports were delivered to managers at all levels of the organisation (seven times more than in 2009) to help them manage transformation within their scope: measuring the impact of actions that have already begun and identifying new priorities with their teams.

Working differently is a major challenge for the Group. In 2018, **a "Positive management" index** was created; this is a key factor for encouraging employee engagement (73%, stable compared to 2018). According to this index, a manager's ability to encourage cross-functionality and cooperation improved (75%, up 1 point from 2018), as did the communication of regular feedback to employees (71%, up 1 point from 2018).

(1) European Works Council comprising the employee representatives from entities based in all countries within the European Economic Area, excluding entities that are not majority-owned.

A COMPETITIVE COMPENSATION POLICY

The Group's compensation policy is founded upon principles of fairness and transparency, which are notably supported by a single annual compensation review process of all employees. The principles on the composition of compensation and its evolution are common throughout the Group and consistent with the objectives of risk management.

The data on the average remuneration and the median remuneration of employees are available in Chapter 2 (Table "Remunerations multiples and changes") based on employees of BNP Paribas (SA) (France and branches) in accordance with applicable laws.

A compensation policy aligned with regulatory changes[(1)]

The Group's compensation policy, applicable to all branches and subsidiaries, including those outside the European Union, aims to ensure consistency between the behaviour of employees whose professional activities have a significant impact on the Group's risk profile and the Group's long-term objectives, particularly in terms of risk management. Since 2009, this policy has continued to help improve governance, identify employees who may be characterised as "Material Risk Takers" (MRT) and apply the special provisions on the award and terms of payment applicable to their variable compensation. The compensation policy and principles of employees identified as MRTs are published annually in a report posted on the BNP Paribas website (http://invest.bnpparibas.com) before the Annual General Meeting of Shareholders[(2)].

The compensation policy also complies with applicable regulations, notably (i) regulations in relation to customer protection (MiFID 2[(3)] or European Banking Authority guidelines on compensation practices in relation to the sale of Retail Banking products) for employees working directly or indirectly with customers, (ii) sector-specific provisions (asset management with AIFMD and UCITS, and insurance with Solvency II), or (iii) business-specific regulations with the application of the provisions of French banking law and the Volcker rule applicable to market participants.

It complies with the laws and regulations in force, including any provisions on minimum wages, which are applied according to employees' level of experience, expertise and market practices.

A competitive and fair compensation policy

In 2019, for retention purposes, the Group awarded for the seventh consecutive year to over 7,330 key employees[(4)] a three-year retention plan (maturing in June 2022), known as the Group Sustainability and Incentive Scheme (GSIS), of which 20% of the initial allocation is related to the Group's CSR performance objectives, based on the four pillars of the Group's CSR strategy[(5)], while the rest is indexed to its operational performance.

BNP Paribas is continuing to increase its attention to equal treatment for all, particularly when it comes to gender equality. Since 2016, a new monitoring indicator on the consistency of compensation granted to men and women has been included in the annual compensation review process, for all the Group's businesses and functions. For a number of years, measures may also be taken locally to reduce any pay gap between men and women. In 2019, BNP Paribas SA set aside a EUR 10 million budget spread over three years to address possible gender differences in annual compensation. In addition, the budget provided by subsidiaries in France was stable at around EUR 1.3 million.

For the first time in 2019, BNP Paribas and its different entities in France, published their gender equality index. The scores earned by the Group's banking and insurance entities[(5)], which represent more than 45,000 employees, are among the best in the industry and well above the statutory minimum, demonstrating the Group's long-term commitment to professional gender equality.

In France, the Group associates its employees with its performance as part of profit-sharing and incentive mechanisms. For 2019, EUR 160 million will be distributed to the estimated 66,305 beneficiaries of entities that are members of the Group profit-sharing agreement (compared with EUR 147 million to 67,269 beneficiaries in 2018). This initiative coincides with SDG 8: decent work and economic growth.

(1) European Directive CRD 4 of 26 June 2013, as transposed into French law in the French Monetary and Financial Code, as well as Delegated Regulation 604/2014 on the criteria for identifying risk-taking employees (MRTs) and the European Banking Authority guidelines on sound compensation policies of 27 June 2016.

(2) The next Annual General Meeting is scheduled on 19 May 2020.

(3) Markets in Financial Instruments Directive.

(4) Key employees: senior managers, high-potential employees or key local resources.

(5) For the 2016 plan, payable in 2019, the achievement of 8 of the 9 CSR criteria defined when the plan was allocated triggers the payment of the amount initially allocated for CSR to the plan beneficiaries, in accordance with the plan's regulations

(6) Scope: Entities with more than 1,000 employees.

In addition, BNP Paribas SA and almost all of the Group's entities in France have established an incentive agreement specific to their business. By year end 2019 **97.17%** of employees were covered by an incentive agreement. In 2019, EUR 124 million will be allocated to approximately 44,881 beneficiaries of BNP Paribas SA (compared with EUR 117 million for 45,746 beneficiaries in 2018). The amounts to be paid for 2019 with respect to the incentive agreements put in place in the subsidiaries will be known at the end of the first quarter of 2020.

Social benefits relating to retirement and savings

Employees can benefit from defined contribution pension plans as explained in Chapter 4 *Financial Statements – Salaries and employee benefits*. Turning to savings, collective profit-sharing schemes may also be put in place to align employees interests with collective performance.

In France, the Group supports employees' voluntary saving efforts with an employer's contribution to savings and retirement plans, totalling EUR 62 million in 2019 (EUR 71 million in 2018).

For **BNP Paribas SA**, the incentive agreement signed for a three-year period in 2019 has three components, with one relating to CSR based on paper consumption per employee, with a target already met in 2019. In keeping with the government scheme, BNP Paribas SA decided in December 2019 to pay a one-off EUR 450 bonus to all employees earning total compensation of less than three times the minimum wage in France (the SMIC), for a total amount of around **EUR 10 million**.

At the end of 2019, the percentage of the share capital held directly or indirectly by Group employees was estimated at 3.61% (3.52% at end 2018)[1].

At **BNP Paribas Fortis in Belgium**, part of the variable compensation known as "collective" compensation is linked to CSR Goals such as customer satisfaction, promoting diversity, improvement of well- being in the workplace, risk awareness and compliance and the reduction of the Bank's negative impact on the environment. The 2019 objectives were met, and a total of EUR 23.1 million was paid to all employees.

In 2019, under the Cafétéria plan at BNP Paribas Fortis in Belgium, two new options allowed certain categories of employees to elect to create additional retirement savings by converting a portion of their variable and/or fixed compensation into two special pension plans.

In **Luxembourg**, the Bank paid non-managerial employees an incentive premium with respect to 2018, which amounted to nearly EUR 3.7 million.

FOCUS ON PEOPLE

Working conditions

In the past few years, as part of a consensus approach involving employees, employee representative bodies, and occupational health services, BNP Paribas has successfully updated its office environments and incorporated Flex Offices, with an option to work remotely. In France, at the end of 2019, more than 14,000 employees were working in Flex Offices, and 11,000 opted to work remotely on a regular basis.

Health and safety conditions at work

The Global agreement states that every Group business/country must establish a healthcare plan for its entity for all employees that covers health expenses (medicines, medical consultations, hospitalisation, etc.). In accordance with its regulatory environment, each business/country determines what coverage is provided, the specific applicability conditions and the terms of financing. These provisions must be in place by the expiry date of the Global agreement (*i.e.* 1 June 2021) with the goal of bringing the deployment of these measures forward to 31 December 2020.

The Group has an **international partnership with Europ Assistance** on health and safety, to provide support to employees on business or personal trips. Should a traumatic incident occur (such as a terrorist attack or an earthquake) in any country, **Europ Assistance** will provide 24/7 telephone support.

The European agreement on preventing stress in the workplace, signed in January 2017, outlines the principles and common framework to implement (information, awareness-raising, evaluation, training, support, communication). In addition, almost all of the Group's entities have initiatives and awareness-raising programmes on the themes of health and safety at work.

The Group signed **the Cancer and Employment Charter**, intended to improve employee support and care and to help them return to work, reorganising workstations where necessary.

Prevention of occupational risks

In **61** countries (**92%** of the Social Reporting Headcount), entities have taken steps to improve the work environment, prevent occupational risks or musculoskeletal disorders and offer advice on ergonomics. **In France**, all employees are monitored by an occupational health service: either an autonomous health service (16 physicians, 34 nurses for two-thirds of employees) or externally by inter-company services, and they can receive social services assistance (around 40 social workers).

Prevention of psycho-social risks

In almost all our locations, training courses on psychosocial risks and the prevention of work-related stress geared to managers or available to all employees have been stepped up. Listening sessions for employees are also widely available, internally or externally, by telephone or face-to-face.

The "**Greenworking**" annual measurement tool on quality of life at work and stress, which is sent to all employees online, has had a 60% response rate ever since it was introduced in 2017. Employees in difficulty can also take advantage of the 24/7 **Care** line and can make an appointment

(1) *Employee savings scheme only.*

with medico-social services. Three guides on prevention, including the **Guide on Burnout**, were shared with managers, HR and the employee representative bodies in 2019. All employees in France must take the compulsory e-learning module on psycho-social risks.

Public health issues

In **53 countries** (84% of the Social Reporting Headcount), entities improved or developed awareness-raising campaigns on health and nutrition. Free vaccination programmes are offered in several countries (hepatitis A and B in Guinea, flu in the United States, Germany, Ukraine, Japan). In Gabon, a uterine cancer screening programme was continued.

In **22 countries**, entities developed initiatives to support employees suffering from addictions (South Africa, Germany, Belgium, Brazil, Canada, Spain, the United States of America, France, Ireland, Luxembourg, the United Kingdom, Turkey, Taiwan, Tunisia, Portugal, etc.).

In France, the Group continues to screen for occupational and, more generally, public health risks, including cardiovascular problems and diabetes, and carries out blood donor and flu vaccination campaigns.

Lectures and consultations on nutrition were offered between April and August 2019.

BNP Paribas is responding to the WHO's recommendation to fight sedentariness by allowing employees to use the "**wePulse**" mobile app to track and increase their physical activity while also participating in group challenges to benefit charities.

Information sessions on a range of health-related themes are organised in the Group "Benefits of physical activity". Awareness campaigns such as the "Tobacco-free month" and "Addictions" were repeated. The Group also offers First Aid training, brief sessions on "Gestures that Save Lives" and Flex Office training for employees. Targeted awareness-raising initiatives on parenting such as "Parenting and children with disabilities" and "When a loved one is suffering from addiction" and domestic violence were held. The Group also takes part in task forces on vulnerabilities, single parenting as well as on violence against women.

BNP Paribas has implemented a host of measures to support employees who are caregivers, such as: an agreement on donating days off for employees who take care of a disabled or dependent parent, child or spouse, awareness-raising initiatives (newsletter, regular group events, how-to guides), training courses, partnerships with experts (Fepem, French Red Cross, etc.), discussion groups on special topics, and access to a platform of psychologists.

Other innovative initiatives supported by the Group extend these programmes, such as the Tilia mobile app, the product of an intrapreneurial venture that combines human support with a digital solution. This app, which can be used on a tablet computer or smartphone, includes features such as personal assistants who are available 24/7 via chat or telephone, a calendar and list of contacts shared between the caregiver and care recipient, a record book (to be notified in real time when the relative's home caregivers visit), and a section with information on topics such as disability, loss of independence, continuing to live at home and advice for caregivers. In November 2019, BNP Paribas and Tilia were recognised with the **Prix Entreprise et Salariés Aidants** (Business and Employee-Caregiver Award) for their actions to help employees who serve as caregivers for relatives.

The aim of all of the Group's actions is to ensure healthy lives and promote well-being for employees of all ages (UN Sustainable Development Goal 3).

Absenteeism

The Group's absenteeism rate(1), calculated for 66 countries, amounts to 3.3% (3.2% in 2018), plus 2.7% absences for parental leave(2) (2.5% in 2018).

	2019(*)	
In%	**Absenteeism rate**	**Maternity/ Paternity**
France	4.6%	2.2%
Belgium	4.9%	0.9%
Italy	3.4%	2.3%
Luxembourg	2.3%	0.9%
Europe (excluding domestic markets)	3.3%	5.4%
Rest of the world	1.2%	1.1%
TOTAL	**3.3%**	**2.7%**

(*) FTE of 96% of the Group's headcount (90% in 2018). Change in methodology prevents comparison with prior year's figures. The absenteeism rate in 2019 has been calculated on average paid and unpaid workforce instead of end-of-period workforce.

(1) The absenteeism rate includes illness, work-related, accidents and occupational illness, excluding travel-related accidents and authorised absences. It is calculated with reference to the method used locally by each entity, weighted by headcount.

(2) The maternity/paternity rate includes maternity and paternity leaves parental leaves as well as adoption leaves.

Work-related accidents

About 1,300 work-related or travel accidents (including 3 fatalities) were reported in 35 countries in 2019.

The frequency rate is 2.4% and the severity rate is 0.05%[1].

Social benefits relating to protection benefits

In addition to the legal and agreement-based provisions, according to the regulations and practices of the countries in which the Group operates, employees can benefit from complementary social security insurance covering their health costs and those of their families. **The Global agreement** states that, by the end of 2020, all BNP Paribas Group employees will have death and disability insurance regardless of cause, except as provided in the policy. In accordance with its regulatory environment, each business/country determines what coverage is provided, the specific applicability conditions and the terms of financing. These provisions must be in place by the expiry date of the **Global agreement** (on 1 June 2021) with the goal of bringing the deployment of these measures forward to 31 December 2020.

In France, the Group offers a mandatory mutualised health plan to employees and a protection insurance system that allows employees to adjust their level of protection according to their personal situation.

It also offers flexible employee benefits, enabling employees to select, to a certain extent, their level of coverage from a range of benefits offered aiming at long-term employability and offering sustainable choices. These benefits are available at **BNL** in Italy, at **BNP Paribas Fortis** in **Belgium** and in the **United Kingdom**.

Harassment and violence at work

The update to the Code of conduct in 2016 strengthens the Group's commitment to combatting harassment, including sexual harassment. The Human Resources Department also introduced an internal procedure in 2018 on how to deal with reports of harassment. Under the Global agreement, this will be implemented in all Group entities, together with measures to support victims. In 2018, 53 sanctions were imposed for sexual or psychological harassment, sexist behaviour or violence at work (17 dismissals, 3 demotions, 1 temporary suspension, 7 official reprimands and 25 warnings). In the first half of 2019, 36 sanctions were imposed for these reasons (11 dismissals, 2 temporary suspensions, 10 official reprimands and 13 warnings).

COMMITMENT 6: A LEARNING COMPANY SUPPORTING DYNAMIC PROFESSIONAL PATH MANAGEMENT

The desire to create an environment that is conducive to employees' development also depends on the Group's ability to create, for each of them, a variety of opportunities for professional growth. This is central to BNP Paribas' employment practices.

The 2019 objective for commitment 6: "the percentage of employees reporting that they completed two training courses over the past 12 months" is set at 90%. This percentage is overcome with a result of 94.8% in 2019.

MANAGING PROFESSIONAL PATHS

Update on the "Leaders for Tomorrow" Talents programme

As part of its transformation process, by the end of 2015 the Group launched the "Leaders for Tomorrow'' initiative, aimed at identifying, developing and promoting high potential employees in order to ensure succession planning for the Group's cross-functional Executive Committees for businesses, functions and regions (Top 500 LfC).

These "Leadership Talents" have been identified by their managers and HR supervisors at the business lines/functions on the basis of "leadership profiles" or of their skills, experience, motivations and personal preferences, which are key elements for a successful transformation.

By the end of 2019, nearly 6,600 "Leadership Talents" belonging to three different levels (Emerging, Advanced or Top) had been identified. They will benefit from specific support and development mechanisms at business, country and corporate level.

In the past year, more than 1,930 "Leadership Talents" of around 40 nationalities from all the business lines/functions participated in Corporate events (mentoring, skills sponsorship, seminars, Personal Development Plan training sessions and online training sessions such as Spark and Navigating Digital), in addition to initiatives offered locally or by their business line or function.

(1) The frequency rate corresponds to the number of accidents per 1 million hours worked and the severity rate corresponds to the number of days lost per 1,000 hours.

Developing skills and improving employability

About Me is an HR platform for employees, managers and HRBP (Human Resources Business Partners) that has been deployed progressively across the Group since 2017. In December 2019, 180,000 employees in the Group has access to About Me, and 165,000 employees will be assessed through it. This platform, which is a key component of career management, is designed to:

- gain a deep understanding of the skills of all employees;
- help employees implement their development plan and pursue professional growth;
- streamline interactions among employees, managers and HRBP and thus promote cross-functional mobility within the Group.

In December 2019, more than 1,500,000 skills were reported, allowing the skills gap to be identified that needs to be filled in the future to help make the Group's transformation a success.

As part of the HR 2020 strategy, the performance review has been simplified and digitised.

To make it easier to implement this new approach, all the steps, including managerial feedback and the Personal Development Plan, have been incorporated in the About Me portal.

Nine performance assessment principles have been established to give managers guidance.

The feedback culture is strongly encouraged: in About Me, managers can offer regular feedback to their employees; this simplifies the annual appraisal review and provides material for the development plans.

All employees also have the opportunity to write feedback for colleagues and receive feedback from them.

TRAINING POLICY

Forging and strengthening the Group's corporate culture

Group campuses, training centres and academies

Our campuses around the world are places of knowledge that host and educate Group employees. For example, the Louveciennes and Singapore training centres have hosted nearly **35,000** and **5,000** participants respectively for training courses and seminars.

The **Leadership & Management Academy** is a cross-functional strategic initiative that uses a one-of-a-kind approach to disseminate key strategic information on leadership in the Group. This academy, which is essential for creating a culture of shared leadership, offers, mainly to managers, workshops on change management, transformation and innovation strategy.

In 2019, there was a large-scale deployment of the certified training course on "Positive Impact Business", which was created jointly by BNP Paribas and Cambridge University. More than 160 employees who engage directly with customers have already received training meant to educate key populations about sustainable development so they can weave it into interactions with their customers. In 2019, more than 130 Top Executives (LfC 500) received training from Cambridge University in a more condensed, half-day session.

➤ TRAINING: TOTAL NUMBER OF HOURS AND EMPLOYEES(1)

	2018	2019
Total number of employees trained (including mandatory training)	203,426	202,876
Total number of employees who completed two training courses (including mandatory training courses)	190,868	198,594
Total number of training hours	4,843,539	4,424,760

(1) Source: My Learning reporting tools. This includes 98% of the Group's physical headcount on permanent or fixed-term contracts in 71 countries (change in scope due to the change in indicator only tracked in My Learning), although other employees (apprentices, employees on vocational training or qualification contracts, interns and casual workers) also receive training.

With an average of 22 hours of training per employee per year, alternative formats (videos and e-learning) continue to grow and now represent 92% of training. With these new formats, training quality is improving and further adapting to new learning methods; this explains this change in the number of training hours. Mandatory training covers sanctions, embargoes, fraud, anti-money laundering and corruption. There was a sharp increase in training on "Business line & functions" (+12 points) reflecting the transformation of businesses and the need to upskill personnel as a result.

TRAINING: OVERVIEW BY METHOD AND CONTENT(1)

	Training method(2)			Training content(3)			
	Classroom based	E-learning	Other formats	Business techniques & functions	Risks & compliance	Culture & awareness of the Group & its entities	Individual skills & management
France	7%	86%	7%	73%	14%	9%	4%
Belgium	13%	84%	3%	32%	36%	11%	20%
Italy	4%	59%	37%	62%	16%	14%	7%
Luxembourg	37%	60%	3%	35%	36%	23%	7%
Europe (excluding Domestic Markets)	11%	69%	20%	29%	42%	19%	9%
Rest of the world	9%	81%	10%	29%	56%	10%	4%
TOTAL	**8%**	**76%**	**16%**	**53%**	**28%**	**12%**	**6%**

(1) Source: My Development; Physical headcount taking into account 98% (97% in 2018) of Group headcount (permanent and fixed-term contracts).
(2) % interns per method out of the total number of training sessions.
(3) % interns per subject out of the total number of training sessions. An employee/beneficiary may attend several training sessions. The total is less than 100% since undetermined training sessions are not included in the report.

Employees at the forefront of their own development

In 2019, autonomy, seamlessness and content customisation were central to the skills development strategy. Throughout the year, based on dialogue with their managers, employees create and update their Personal Development Plans (PDP) in **About Me**. Plans are based on varied, complementary development actions that for the most part are accessible through **My Development**, the catalogue of Group training courses that is now more ergonomic and personalised. As they build on their PDPs, employees can receive recommendations tailored to their development needs, preferences and pace.

A dynamic offer to better develop the skills of the future

In 2017, as part of the **Strategic Workforce Planning**, the HR teams worked closely with the Group's business lines to identify the **critical and top-priority topics** and **skills** for the Group's transformation. The effort identified **30 future jobs** in **Digital, Data and Agility**.

The goal of the Digital, Data & Agile Academy is to use **upskilling and reskilling programmes** to guide employees in developing the skills related to these new jobs and to provide managers with **the levers to speed up the transformation of the BNP Paribas Group**. This academy also aims to let **entities pool** training courses in these fields and **limit the need to call on outside experts** on these topics. It is also meant to help **streamline internal mobility**.

After a pilot phase involving a few jobs (Data Analyst, Data Scientist and Developer), the academy was opened to all employees in January 2019 and new offerings have scince been added.

In 2019, more than 600 employees from 25 countries completed the Digital, Data & Agile Academy training programme.

The integrated "Legal" Function rolled out the certified training offered by the **"Digital Legal Skills Centre" (DLC2)** that will help legal experts address the challenges of digital transformation in their profession (250 lawyers received training in 2019).

This innovative and ambitious training policy illustrates BNP Paribas' commitment to promoting lifelong learning opportunities for employees, in line with SDG 8 (decent work and economic growth).

Intrapreneurship(1)

Intrapreneurship helps to develop skills and drive the transformation of business models, as demonstrated by the **People'sLab4Good**, the intrapreneurial **Corporate engagement** programme to fully support **100% positive impact** projects. The 2019 cohort consisted of 12 intrapreneurs from four countries (France, Belgium, Tunisia and Morocco) and six new projects were developed within the business lines.

Corporate volunteering work and other Group solidarity activities

In 2019, the programme **#1MillionHours2Help** structures the ambition stated in the Global agreement to do more for civil society (NGOs, associations) by promoting the skills of employees. Through this initiative, BNP Paribas aims to foster more sustainable, equitable growth by **allowing all employees to use working time to help charitable organisations** build a more inclusive, eco-friendly world. This target **of 1 million solidarity hours** equates to around half a day of paid hours per employee per year.

In 2019, more than 26,000 employees stated that they had been involved in solidarity initiatives totalling over 450,000 hours, either during working hours or outside of working hours with compensatory leave.

In France, the Group promotes end-of-career corporate volunteering work through several agreements. In 2019, 195 employees (89 of whom started during the year) were able to participate in work with non-profit organisations lasting 6 to 24 months.

(1) An intrapreneur is an employee who develops, in-house, an entrepreneurial project with the agreement and support of the Company.

MOBILITY

There were 5,666 transfers between entities and business lines[1], a drop of 5% (5,989 in 2018). There were 2,984 in France (up 7% compared to 2018).

The Group mobility policy is a cornerstone of our HR 2020 transformation plan and is not only a key factor in hiring and retaining the best talents, but is also central to the BNP Paribas Employee Value Proposition.

The three main challenges of mobility are:

- the development of the Company, mobility being a preferred way of matching resources to changing employment needs and skills;
- individual development, allowing employees to develop their skills and build a motivating career path;
- social responsibility by contributing to responsible employment management.

For the sixth consecutive year, BNP Paribas organised "Mobility Days" for three weeks in 43 countries, reaching 13,000 employees as a result. An Instagram campaign was launched in eight countries to provide information on the major mobility-related topics related. Many countries held Personal Development workshops to encourage employees to act on their skills development goals and to formulate their training plans.

In France, there were **Mobi'Live** events to present some of the jobs in Advisory and Compliance. At the same time, many managers participated in a total of 35 pitch sessions to promote more than 100 open positions in the Group.

To encourage dialogue between employees who can potentially benefit from internal mobility and Business Line ambassadors, France launched its internal version of its **Jobpreview** platform. The purpose of this initiative is to help Group employees define their career paths. This platform completes the event-related offerings available to employees (remote chat, speedmeeting, networking, etc.) to help them see how they can put themselves forward in the Group by creating bridges between the business lines.

➤ TOTAL NUMBER OF POSITIONS PUBLISHED AND JOBS FILLED INTERNALLY[1]

	2018			2019		
	Estimated number of positions published	Positions provided internally	% of positions provided internally	Estimated number of positions published	Positions provided internally	% of positions provided internally
France	4,945	1,646	33%	5,806	2,466	42%
Belgium	1,496	1,384	93%	1,276	1,480	116%[2]
Italy	615	127	21%	630	217	34%
Luxembourg	272	128	47%	198	90	45%
United Kingdom	1,630	521	32%	1,354	487	36%
Ukraine	2,405	876	36%	2,541	937	37%
Poland	1,548	276	18%	354	260	73%
Turkey	293	26	9%	414	92	22%
United States of America	5,936	1,476	26%	4,190	1,396	33%
Other countries (Algeria, Spain, Hong Kong, India, Morocco, Portugal, etc.)	6,622	709	11%	5,996	1,183	20%
TOTAL	**25,762**	**7,169**	**28%**	**22,759**	**8,608**	**38%**

Source: Extract from e-jobs and Taleo and the complementary declarations of the countries/entities.
(1) On the basis of 89% of the Group's workforce (permanent and fixed-term contracts).
(2) The rate is higher than 100% because some adverts are for several vacancies. In Belgium, 405 people were recruited externally in 2019.

In France, nearly **10,000 internal** moves were made compared with **12,800** in 2018.

To encourage internal mobility throughout the Group, two major tools have been deployed, one with 168,092 employees in 54 countries (My Mobility), and the other with 181,807 employees in 61 countries (Taleo).

(1) Based on 94% of employees of the Group on permanent contracts.

7.4 Our civic responsibility: being a positive agent for change

A committed participant in society, BNP Paribas instigates and takes part in numerous initiatives to combat social exclusion and promote education and the arts. In the context of its civic responsibility, the Group uses all the available tools, as a banker, employer and philanthropist, to foster a sustainable and harmonious development of society. These actions are in line with its three commitments:

- **Commitment 7:** Products and services that are widely accessible;
- **Commitment 8:** Combat social exclusion and encourage respect for human rights;
- **Commitment 9:** Corporate philanthropy policy focused on the arts, solidarity and the environment.

The highlights of 2019 include:

- in the area of financial inclusion:
  - BNP Paribas celebrated **30 years of working in the microfinance sector**: more than 2 million people without access to banking services, indirectly financed by BNP Paribas via 84 Microfinance Institutions (MFIs), have thus been able to launch or grow their business. Since 81% of beneficiaries are women, the Group has created a digital exhibition, Little Big Movement(1), featuring around 50 women micro-entrepreneurs,
  - BNP Paribas has signed a partnership agreement with UN Environment as part of the **Microfinance for Ecosystem-based Adaptation (MEbA)** project. As a result, smallholder farmers in Senegal and Colombia have access to innovative financing solutions to help them adapt to climate change.
- in addition, to encourage social inclusion in France:
  - BNP Paribas helped to launch ***L'Ascenseur*** ("the Elevator"), the only place in Europe that promotes access to education, employment, sport and the arts for young people from disadvantaged backgrounds,
  - reaffirming its 20-year **commitment to Seine-Saint-Denis** French department, BNP Paribas has signed the "SSD Égalité" charter, which furthers its efforts to boost the economic and social development of the region.
- Lastly, in terms of generosity:
  - once again, the Rescue & Recover Fund enabled teams to react swiftly and effectively to **humanitarian disasters** thanks to donations from BNP Paribas staff, retired employees and customers in France, which were then matched by the Bank. Actions included the emergency response in Mozambique in the wake of Cyclone Idai. A development campaign was also launched to facilitate access to healthcare for women living in extreme poverty. In total, more than EUR 400,000 was raised for partner non-governmental organisations (NGOs),
  - the BNP Paribas Foundation donated EUR 20 million to help **restore Notre-Dame Cathedral in Paris** following the fire that affected this Unesco World Heritage Site.

COMMITMENT 7: PRODUCTS AND SERVICES THAT ARE WIDELY ACCESSIBLE

The Group strives to improve financial products accessibility around the world, since **financial inclusion** of populations is a key accelerator of economic development and satisfies the 1st, 8th and 10th Sustainable Development Goals of the United Nations. This approach is notably accompanied by efforts to tailor the offering and provide the financial education needed to ensure better use of financial products.

GROUP SUPPORT TO MICROFINANCE

BNP Paribas has been committed to microfinance for 30 years and uses several levers to promote its deployment: direct financing of Microfinance Institutions (MFIs), investment in specialised funds, development of positive impact funds, distribution of microfinance funds, carrying out technical assistance missions, etc.

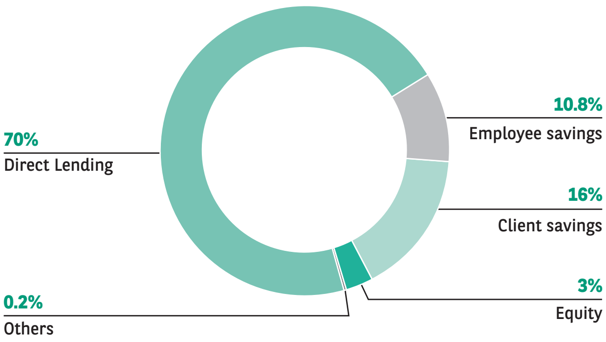
A development strategy built around financial and social performance

In 2019, the Group's overall support towards microfinance exceeded EUR 357 million, enabling the direct financing of 28 MFIs in 15 countries, and more than 100 MFIs indirectly in most countries around the world via 11 dedicated funds in which the different entities of the Group invest. New MFIs were supported in 2019, including Than Hoa in Vietnam and Madura in India, which exclusively target communities of women in rural areas who are excluded from conventional financing. In the United States, Bank of the West helped to finance the opening of a new branch of the MFI Grameen America, which is dedicated exclusively to supporting women micro-entrepreneurs.

BNP Paribas is mindful of the social performance of its MFI portfolio, as evidenced by the score of 79% measured by the SPI4 (Social Performance Indicators) tool developed by the NGO Cerise, while the SPI4 global base achieves an average score of 65% calculated over nearly 300 MFIs worldwide.

(1) https://group.bnpparibas/en/microfinance30years.

BNP PARIBAS' SUPPORT TO MICROFINANCE AT 31 DECEMBER 2019



BNP Paribas celebrates 30 years of involvement in microfinance

In 1989, the Group launched its first microfinance partnership by financing Crédit Rural de Guinée. Some 30 years later, microfinance has become one of the Bank's flagship commitments, indirectly benefiting more than 2 million people worldwide. This action was made possible thanks to the aggregated financial support given to 84 MFIs in 33 countries, with a total of nearly EUR 900 million cumulated loans. To commemorate this 30-year commitment, in 2019 the Group created a digital exhibition, **Little Big Movement**(1), which illustrated the impact of microcredit on women entrepreneurs.

The Group was also involved in major events and helped to define microfinance best practices. For example:

- the Group contributed to the drafting of the European Microcredit whitepaper(2) published by Paris Europlace and the European Microfinance Network (EMN);
- BNP Paribas helped to train the Managers and CEOs of African MFIs on financial and social issues during the Afican Microfinance Week (SAM 2019 - Semaine Africaine de la Microfinance).

Climate risk adaptation: alliance to strengthen the resilience of smallholders farmers benefiting from microloans

BNP Paribas contributed financially to the UN Environment program MEbA "Microfinance for Ecosystem-based Adaptation(3)" and was involved in rolling out the project to Senegalese micro-borrowers (women farmers financed by Caurie Microfinance) and Colombian micro-borrowers (financed by Fundacion Delamujer) to improve the resiliency of these populations against the effects of climate change. The aim is to contribute to the emergence of green microfinance.

PROVIDING ASSISTANCE TO FRAGILE CUSTOMERS

BNP Paribas pays particular attention to customers who are in difficulty, for example because they have a disability or because of their financial situation, and ensures that they have access to banking services.

Customers with disabilities or fragilities

The Bank has made special arrangements for customers with disabilities or reduced mobility by facilitating access to its products and services and making branches more accessible for the elderly, for people with disabilities or those who are marginalised in society. In Belgium, BNP Paribas Fortis is continuing to improve the accessibility of its premises. At end-2019, 36% of its branches were accessible to people with reduced mobility. In Poland, BNP Paribas Bank Polska has converted some of its branches and signed several partnership agreements on accessibility. The result is that the President of the Republic of Poland gave the Bank the Award for "Accessibility Leader 2019" in the category 'branch network'.

BNP Paribas Cardif also has various initiatives with respect to disabilities:

- in Germany, a specific support for temporary disability, that helps customers in their day-to-day lives (advice and names of healthcare providers, etc.);
- in Turkey, Engelsiz Hayat Değer life insurance, which is aimed at families who have children with disabilities, and includes support services to make life easier (hospital discounts, physiotherapy, etc.);
- BNP Paribas Cardif has also supported the start-up Tangata (see *Investments and financing with a positive impact*, Commitment 1), a platform designed to simplify everyday life for people with disabilities and caregivers by making it easier for them to access leisure activities and services.

Customers experiencing financial difficulties and the access to credit facilities

The Group is not only committed to making its loans more accessible, but also to preventing its customers from overindebtedness.

As an example, French Retail Banking has set up a scheme for individuals who find themselves in financial difficulty and thus may obtain the expertise of 300 advisers specialised in budgeting solutions. In 2019, a "customised path" enabled in-branch advisers to be even more proactive: the aim is to avoid a degradation of the situation that could lead to overindebtedness. The advisers can suggest the deferral of monthly loan repayments, the use of insurance solutions, or referral to an organisation specialised in budgeting solutions.

BNP Paribas Personal Finance has also put in place a system to find and support customers in difficulty, with a tailored solution in the 32 countries where it operates. Overall, in 2019, 45,000 customers were contacted, 17,000 of whom received specific solutions (a 78% increase on 2018).

On the same topic but a different angle, the Group's subsidiary Nickel offers a bank account accessible to everyone from the age of 12, without discrimination, conditions or minimum income requirements, and provides a fresh start to people who have been barred from having a bank account. At the end of 2019, nearly EUR 1.5 million Nickel accounts had been opened (an increase by 32% on 2018), 78% of them are opened by persons earning less than EUR 1,500 per month.

(1) https://group.bnpparibas/en/microfinance30years

(2) http://unepmeba.org/en/

(3) http://mfc.org.pl/wp-content/uploads/2019/07/2019_paris_europlace_whitepaper_on_microfinance_july_2019.pdf

Financial training and support for young people

Financial education has demonstrated its effectiveness in combating excessive indebtedness and encouraging economic growth. Therefore, most Group entities deploy training programmes in several countries. These include:

- "Responsible Budget", digital platform targeting young people, their families and teachers showing them how to better manage their budget using "serious games". This platform is now live in three BNP Paribas Personal Finance entities: France, Italy and Belgium since 2019.

  This and other youth support programmes helped 50,000 young people in 2019, compared with 21,000 in 2018;
- "I Bring a banker to school" ("J'invite un banquier dans ma classe"), led by French Retail Banking in association with the Fédération Bancaire Française (French Banking Federation), has tought to more than 3,000 pupils of year 5 and 6, how to manage a budget;
- in Morocco, BMCI has joined forces with MATYN, a women-led cooperative, to provide training in financial education and digital marketing.

In addition, in France, to tackle the difficulties young people have in finding housing, French Retail Banking offers the "Guarantme" product. This includes a free joint and several guarantee, an advance on a deposit and a home insurance.

COMMITMENT 8: COMBAT SOCIAL EXCLUSION AND SUPPORT HUMAN RIGHTS

A player in combating social exclusion for many years, BNP Paribas works on providing long-term support in the areas of at risk communities, in particular in sensitive urban areas. More broadly, its commitment to promoting human rights continues to gain strength.

COMBAT SOCIAL EXCLUSION

Combating social exclusion is one of the main priorities of BNP Paribas. It focuses on two key areas: integrating young people and setting up local community schemes.

Alongside these actions, the Group also encourages its employees to get on board by arranging skills-based volunteering with associations involved in tackling the social inclusion of vulnerable people (see *"Good place to work" and responsible employment management*, Commitment 5).

Projet Banlieues: an initiative to foster social inclusion in disadvantaged urban areas

For more than 10 years, the BNP Paribas Foundation and the French Retail Banking network have supported community projects in urban areas considered a priority by the local council. The BNP Paribas Foundation supports numerous partnerships with recognised associations, particularly in the fields of education and employment.

Education

Working alongside the **AFEV association** to tackle underachievement in schools – the flagship priority of the Projet Banlieues – meant that 16,800 children and young people received support in 2019.

Similarly, as a result of its partnership with the **EPA association**, the BNP Paribas Foundation has set itself the goal for the 2019-2020 academic year of encouraging around 8,000 young people on vocational courses to take part in mini-corporate programmes. The idea is to bring young people together for a day so that they can come up with solutions to a problem submitted by a partner.

Employment

A long-standing partner of the **Association for the Right to Economic Initiative (Adie)**, in 2019 the BNP Paribas Foundation assisted it in arranging finance for some 4,000 people, more than 3,000 of whom were starting up or expanding a small business. In the end, around 5,700 jobs were created or maintained. This is on top of the support given to 16 Adie branches located in priority urban areas.

Outreach actions

In addition to this, in 2019 the BNP Paribas Foundation extended its policy of supporting local associations to 80% of people living in priority urban areas. In 2019, 186 associations benefited from the Foundation's EUR 590,000 budget.

> **20 years of initiatives in Seine-Saint-Denis**
>
> In 2009, BNP Paribas, the leading private-sector employer in Seine-Saint-Denis, marked 10 years of being based in the region by launching Odyssée Jeunes. Ten years later, this corporate philanthropy programme has funded 1,200 school trips, benefiting around 50,000 pupils from 137 secondary schools.
>
> In 2019, BNP Paribas signed the "SSD Égalité" charter, thereby reaffirming its commitment to the region in six key areas: education/young people, employment, entrepreneurship, regional appeal and the energy, environmental and inclusive transition

Repairing the social ladder in France

Opened in June 2019, *L'Ascenseur* is the only place in Europe that brings together some 20 associations and social enterprises around a common goal: facilitating access to education, employment, sport and the arts for young people from disadvantaged backgrounds. The brainchild of article 1 and Mozaïk RH, L'Ascenseur relied on crucial support from the various business lines of BNP Paribas, which is the lead partner and founding sponsor. Thanks to the combined efforts of the Bank's various departments, 400,000 young people could receive support from *L'Ascenseur*'s tenants in 2019.

Developing the skills and occupations of the future

At the Tech for Good 2019 Summit, BNP Paribas, IBM and Orange announced the launch of the P-TECH (Pathways in Technology Early College High Schools) project in partnership with the French Ministry of National Education and Youth. Two schools in the French departments of Nord and Hauts-de-Seine adopted this initiative at the start of the 2019 school year, the aim being to encourage equal opportunities and develop skills for the occupations of the future.

BNP PARIBAS IS COMMITTED TO RESPECTING HUMAN RIGHTS

Commitment at the highest level

BNP Paribas adheres to internationally-recognised human rights standards. This commitment is expressed at the highest level in the BNP Paribas Declaration on Human Rights, signed by the Group's Executive Management and promoting the respect of these rights within BNP Paribas' sphere of influence.

The Group supports the **United Nations Guiding Principles** on Business and Human Rights and the OECD's Guidelines for Multinational Enterprises, in accordance with the "Protect, Respect and Remedy" framework. It has also chosen to follow the recommendations of the United Nations Guiding Principles Reporting Framework, launched in February 2015.

Moreover, in late 2018, BNP Paribas published a **Responsible Business Relationships Charter**(1) addressed towards its customers, reaffirming its will to work with companies demonstrating a high level of governance and responsibility in matters of human rights and fundamental freedoms, health and safety and the environment, in their business practices..

Since 2013, **BNP Paribas has been taking part in the meetings and annual gatherings of the Thun group**, an informal group representing international banks seeking to improve the integration of the UN Guiding Principles within the policies and practices of financial institutions. In 2019, the matters of due diligence and human rights performance indicators, as well as the current and future regulatory developments, were discussed. The question of the impact of climate change and artificial intelligence on the banking sector's handling of human rights was also examined.

Training

The Group focuses on employee training, which is an important component of its human rights risks management process. Since 2016, a "Human Rights and Business" training course, set up with the help of the French association Entreprises pour les Droits de l'Homme (EDH), of which BNP Paribas is a member, has been assigned to Group employees who can be confronted with human rights issues as part of their work. At the end of 2019, **88% of the employees** to whom the training had been assigned had completed the **online awareness module** dealing with taking human rights into account in lending decisions. Since 2016, more than 7,000 employees have completed this training.

Monitoring of indirect "salient" risks(2) in the management of distribution of the Group's financial products and services

BNP Paribas has identified two main risks in the distribution of its products and services:

- **non-discrimination in access to financial services**;
- **right to privacy** (protection of clients' personal data).

Non-discrimination in access to financial services

The Group considers that sustainable economic development promotes wider access to fundamental rights. For that reason, it strives to boost **access to financial services** in the communities in which it operates (see *Products and services that are widely accessible*, Commitment 7).

Right to privacy

Privacy protection is identified as a priority ethical issue in the Code of conduct. Binding Corporate Rules, approved by the EU Data Protection Authorities, have been established on **Human Resources data**, providing an adequate -level of protection across the Group. In 2019, the Group continued to strengthen data protection activities and increased **the existing Data Protection Network** to over 100 individuals across the world, achieving coverage by territory and individual business line.

The Group enhanced activities to continuously measure developing maturity against GDPR articles and identify areas of improvement through the use of key performance indicators, for example on responding to requests by Data Subjects or conducting data protection impact assessment and personal data breach management. Moreover, the Group has further standardised and automated methods to report personal data breaches and conduct privacy risk assessments to drive overall improvement in process.

(1) Available on www.group.bnpparibas.com.

(2) "Salient" is the term used by the drafters of the United Nations Guiding Principles Reporting Framework.

Monitoring of salient risks in the Group's financing and investment activities

The activities of the Group corporate clients may pose a risk to human rights, particularly in the area of workers' rights, and have an impact on local communities.

The Group uses its influence to encourage its clients to manage their own activities with respect to human rights. It also seeks to identify, evaluate (due diligence process), monitor and foster the improvement of the current and future performance of clients operating in sensitive sectors (defence, agriculture, palm oil, etc.) through the application of **its investment and financing policies** (see *Systematic integration and management of Environmental, Social and Governance (ESG) risks*, Commitment 3).

To ensure that the existing system meets the requirements of the French Duty of care, BNP Paribas set up a risk mapping of its clients taking into account both their business sectors and the countries they operate in. This tool covers the matter of human rights through the analyse of several criteria, such as **child labour**, **forced labour**, **human trafficking** and failure to respect the **rights of local communities**. The criteria are both sector-weighted and geographically weighted. The risk mapping thus allows the concerned business lines and functions to better deploy and monitor the most adapted due diligence measures. The criteria are both sectorweighted and geographically weighted. The risk mapping thus allows the concerned business lines and functions to better deploy and monitor the most adapted due diligence measures. Concerned to implement the most appropriate and thorough duty of care measures (see Duty of care and modern slavery and human trafficking statement in section 7.6).

Workers' rights

The **human rights criteria in the financing and investment policies of sensitive sectors** in sensitive sectors deal with matters such as workers' rights, in particular child and forced labour worker, health & safety and freedom of association. These issues are also tackled in the analysis of projects covered by the Equator Principles (see *Systematic integration and management of Environmental, Social and Governance risks*, Commitment 3).

Rights of local communities

Respect of the rights of local communities - which are at the heart of most controversies linked to major industrial projects - is another "salient" issue.

Therefore, for its project finance activities, BNP Paribas encourages its clients to obtain the Free, Prior and Informed Consent (FPIC) of the local communities impacted by their projects.

In accordance with the Equator Principles (see *Systematic integration and management of Environmental, Social and governance (ESG) risks*, Commitment 3), the **Group ensures that the negative impacts are avoided and, if necessary, remedied**. Moreover, in 2019, BNP Paribas actively participated in the update of the Equator Principles (EP4) standards. EP 4 focused on a number of key subjects, Social Impact & Human Rights being one of them. As part of the update process, BNP Paribas was able to give its opinion at the different stages of discussion including on specific human rights issues like the FPIC of indigenous peoples, or the implementation of grievance mechanisms by clients, in particular through its participation to the "Social Risk" Working Group. Discussions resulted in a greater acknowledgement of the UN Guiding Principles by the EP, and a broader use of EP-defined standards – including mandatory FPIC – in "Designated Countries", where they were previously considered as optional. The new version of the Equator Principles will come into force in July 2020.

Due diligence and dialogue

In the event of suspected or identified serious abuses of human rights by a BNP Paribas customer or a company in its portfolio, the Group conducts in-depth due diligences and discusses the matter with the company concerned (see *Systematic integration and management of Environmental, Social and Governance (ESG) risks*, Commitment 3).

In 2019 for example, BNP Paribas received a letter from an NGO informing it of the impending referral to of the IFC's (International Finance Corporation, a subsidiary to the World Bank) ombudsman on behalf of communities that were allegedly forcibly displaced by a mining company operating in West Africa, without having had access to a grievance procedure or the opportunity to lodge an objection. These allegations concerned the growth of mining activity in the country and mentioned the high levels of pollution of local water sources and a significant deterioration in air quality due to the release of hazardous substances from mining operations. BNP Paribas forwarded these elements to the concerned Relationship Managers business managers to inform them and have them to engage in a direct dialogue with the mining company, one of the Group's clients. Discussions are ongoing between the mining company, BNP Paribas and the NGO. The mining company has demonstrated its willingness to cooperate and to settle the complaint, which is still under investigation.

COMMITMENT 9: CORPORATE PHILANTHROPY POLICY FOCUSED ON THE ARTS, SOLIDARITY AND THE ENVIRONMENT

The Group is developing a structured corporate philanthropy policy that is both global and local. The BNP Paribas Foundation coordinates this commitment around three areas of application: solidarity, the arts and the environment (see *Advance awareness and sharing of best environmental practices*, Commitment 12).

In 2019, the BNP Paribas philanthropy budget of EUR 44.53[1] million was broken down as follows:

- 68.2% for solidarity, including support for refugees;
- 21.3% for the arts;
- 10.5% for the environment.

(1) *This amount does not include the exceptional support of EUR 20 million contributed by BNP Paribas to the* Fondation de France *for the reconstruction of* Notre-Dame de Paris *Cathedral.*

SOLIDARITY

The extent and diversity of BNP Paribas' commitments are reflected in the broad range of initiatives to promote social inclusion, equal opportunities and employee commitment.

Promoting social inclusion

Support the integration of refugees

In 2019, BNP Paribas renewed its support plan for the integration of refugees by pledging EUR 4.5 million over three years. The scheme is now up and running in 10 European countries. It is in this context that the BNP Paribas Foundation, which coordinates these actions, has partnered with **Simplon** in France. The aim is to support the professional integration of 280 refugees through a scheme combining a six-week training course enabling them to acquire digital skills and learn French.

Supporting major players helping vulnerable populations

In France, the number of homeless single women has doubled in the space of 10 years. Living on the streets, these women are particularly exposed to danger and have difficulty in accessing care. This is why the BNP Paribas Foundation joined forces with **Samusocial** in 2019 to open a centre in Paris dedicated to women's health (nurses, gynaecologists, etc.).

Fostering equal opportunities

Many partnerships are in place to assist future generations and provide educational support to the most disadvantaged young people.

Dream Up: education through art

Following its initial success, the **Dream Up** programme was renewed for the period 2018-2020, with a dedicated budget of EUR 1.8 million. In 2019, 20,000 children took part in this scheme.

International community initiatives

In 2019, a wide range of initiatives promoting a decent education either started up or operated on a worldwide basis. For example, since 2012, the BMCI Foundation in Morocco has supported **Al Jisr**, an NGO which sets up libraries in state schools in disadvantaged neighbourhoods. In total, more than 300 schools have been given more than 76,000 books, benefiting more than 180,000 pupils.

Fostering employee commitment

As well as actively encouraging its employees to volunteer (see *A learning company supporting dynamic professional path management*, Commitment 6), BNP Paribas provides financial support to everyone who chooses to get involved.

Help2Help

Devised by the BNP Paribas Foundation, the **Help2Help** programme showcases and supports the voluntary commitment of employees to NGOs that promote community and humanitarian causes. Now deployed in more than 30 countries, this programme supported the projects of 250 associations in 2019 thanks to an endowment totalling EUR 750,000.

Rescue & Recover Fund: 7 years of humanitarian service

Created in 2012, the **Rescue & Recover Fund** makes it possible to react quickly and effectively worldwide in the event of a humanitarian disaster. Intended for employees, French Retail Banking customers and retired members of the Group's Retirees' Association, this fund collects their donations and matches the amount to finance the projects of three NGO partners. In seven years, more than EUR 4 million has been donated to on-the-ground actions.

In 2019, an emergency response was organised in Mozambique in the wake of cyclone Idai in March. At the end of the year, a campaign to support access to healthcare for women living in extreme poverty in France, Madagascar and the Philippines saw more than EUR 260,000 donated to NGOs. In total, more than EUR 400,000 was raised for NGOs during the year. At the same time, the fund's teams have launched new tools to raise awareness among an increasing number of employees, including setting up donation boxes in 5 of the Group's buildings.

ARTS

Contemporary creation is at the heart of the BNP Paribas Foundation's cultural philanthropy programme. A committed patron of many artists and the institutions that welcome and present their works, the Foundation mainly supports contemporary dance and jazz.

Celebrating contemporary dance to mark 350 years of the Paris Opera

A patron of contemporary dance since 1984, the BNP Paribas Foundation champions creativity by supporting choreographers who push the boundaries of creative expression. In 2019, the BNP Paribas Foundation supported 5 arts institutions and 17 companies, including **Kidd Pivot**. Led by choreographer Crystal Pite, it received funding from the Foundation for a new ballet commemorating the 350th anniversary of the Paris Opera.

Jazz sponsorship centred around creativity

Recognised as one of the leading jazz sponsors, the BNP Paribas Foundation has supported the careers of many musicians and backed several international festivals. In 2019, the Foundation decided to partner with BNP Paribas in the Netherlands by lending its support to **Metropole Orkest**. This unique ensemble on the international music scene, part big band, part symphony orchestra and featuring around 40 musicians, works with some of the biggest names in jazz.

> **Notre-Dame de Paris**
>
> On 15 April 2019, Notre-Dame Cathedral in Paris was affected by a fire which caused extensive damage to the roof, structure and Viollet-le-Duc's spire. Reacting swiftly to the disaster, the BNP Paribas Foundation pledged EUR 20 million to help restore the monument, which is on the list of world heritage sites.

7.5. Our environmental responsibility: accelerating the ecological and energy transition

Since 2011, BNP Paribas has put climate change as the priority focus of its efforts, given its position in the financing of the global economy, particularly in the energy sector. The "BNP Paribas Commitments for the Environment" reaffirmed this proactive approach while making a formal commitment to extend them to biodiversity, water, natural resources and circular economy. Implemented through actions and positions described elsewhere (see *Systematic integration and management of Environment, Social and Governance (ESG) risks*, Commitment 3), the Group deploys its environmental responsibility in three complementary areas:

- **Commitment 10:** enabling our clients to transition to a low-carbon economy respectful of the environment. As a financial player, it is by supporting the clients in their energy and environmental transition that BNP Paribas can have the greatest impact in terms of protecting the environment, tackling climate change and aligning with the objectives of the Paris Agreement;
- **Commitment 11:** reducing the environmental impacts of our operations;
- **Commitment 12:** advance awareness and sharing of best environmental practices. The Group takes a broad-based approach towards building collective knowledge and awareness, involving its stakeholders in this process. It is in fact convinced that the energy and environmental transition can succeed if stakeholders work together to bring about the necessary transformation of society as a whole.

2019 saw numerous tangible contributions of BNP Paribas' environmental responsibility:

- on tackling climate change:
  - funding for renewable energy reached EUR 15.9 billion; BNP Paribas is ranked **in 2nd place when it comes to financing renewable energy projects** in the EMEA region and is 4th **internationally** (Dealogic ranking end-2019). In addition, **at the end of 2019, BNP Paribas had structured and placed EUR 9.8 billion of green bonds**,
  - on the investment side, the Group launched 10 **climate indices**, raising more than EUR 750 million in 2019. BNP Paribas Asset Management's green funds, which are mainly invested in alternative energies and energy efficiency, had **EUR 11.6 billion in assets** under management as of 31 December 2019,
  - within its own operations (direct emissions and indirect emissions relating to energy purchases and business travel), BNP Paribas is continuing to cut its energy consumption, with a 5.3% reduction in CO_2 emissions per FTE at end-2019. In 2019, this allowed it to exceed its target of a 25% reduction by 2020 in greenhouse gas emissions, relative to 2012. This was largely due to a more than 12% reduction in business travel in 2019 compared to the prior year (in km/ETP). At the same time, the share of renewables in the Group's electricity supply has risen to 35% of the total in 2019. Lastly, **the Group offsets its residual emissions and has been carbon-neutral** within its own operational scope since 2017.
- in terms of biodiversity:
  - the Group is committed to **protecting the world's oceans**, and in the maritime sector, EUR 1 billion has been earmarked for the environmental transition of ships by 2025,
  - the BNP Paribas Foundation's **Climate Initiative** programme has been expanded to include biodiversity issues and has become the **Climate & Biodiversity Initiative**. Since its launch in 2010, the programme has granted EUR 18 million in funding for 27 research projects. It has also raised awareness of climate change and biodiversity issues among employees and the general public through specific events.
- lastly:
  - the Bank has bolstered its commitment to **circular economy**, notably by creating the joint venture BNP Paribas 3 Step IT, offering companies an end-to-end management service for their technological equipment at each stage of its life cycle. The Bank has also launched the first exchange-traded fund (ETF) dedicated to circular economy.

Firmly of the view that the energy and environmental transition requires the joint commitment of all stakeholders to succeed, BNP Paribas is a member of several associations or coalitions that seek to promote collective action in favour of the energy and environmental transition:

- in 2019, Jean-Laurent Bonnafé, Director and Chief Executive Officer of BNP Paribas, became **Chairman of the environmental business forum EpE** (Entreprises pour l'environnement), giving him a public platform for publicising EpE's work and reports;
- BNP Paribas is also involved in the work of the **Hydrogen Council**. This brings together leading multinationals in the energy, transport and industrial sectors who share the same long-term vision that hydrogen can support the energy transition.

COMMITMENT 10: ENABLING OUR CLIENTS TO TRANSITION TO A LOW-CARBON ECONOMY RESPECTFUL OF THE ENVIRONMENT

The Group partners with its clients, whether individuals, businesses or investors, in their transition to a low-carbon, more eco-friendly economy. To this effect, it uses several levers to cater for their specific needs.

HELPING TO FINANCE THE ENERGY AND ENVIRONMENTAL TRANSITION

Increased support for renewable energy

At end-2019, financing for the renewable energy sector amounted to EUR 15.9 billion. The Group raised its financing target for the sector to EUR 18 billion by the end of 2021 (versus EUR 15 billion at the end of 2020).

Its teams worked alongside the consortium *Eolien Maritime France* consortium as a financial adviser and underwriter for France's first offshore wind farm. This will have 80 turbines with a power generation capacity of 480MW, equivalent to 20% of the energy needs of the Loire-Atlantique region and representing a total investment of EUR 2 billion. As a result, BNP Paribas is ranked in 2nd place for financing renewable energy projects in the EMEA region and is 4th internationally (Dealogic end-2019 ranking).

In parallel with these actions, BNP Paribas Cardif, the insurance subsidiary of BNP Paribas, has set itself the target of EUR 3.5 billion of green investments by the end of 2020. In two years, the insurer has more than doubled its green investments in the general funds of its home countries (France, Italy and Luxembourg).

A major player in green bonds

In 2019, the Group was the third largest global player, all currencies taken together, on the green bond market according to Dealogic. Since 2012, the Group has been joint lead manager for EUR 29.9 billion of green bonds. The amount of green bonds placed in 2019 by BNP Paribas totalled EUR 9.8 billion[(1)] This includes in particular its participation in:

- the first sovereign green bond in Latin America (Chile) for EUR 1.3 billion, which will be partly used to finance renewable energy and environmental protection projects;
- Apple's inaugural EUR 2 billion green bond, which will be used to reduce Apple's overall carbon footprint and to develop the use of more sustainable materials in its products and processes.

A key actor in the booming market of sustainability linked loans

BNP Paribas is extremely active in the new and fast-growing market of Sustainability Linked Loans (SLLs). With an SLL, the interest paid by the borrower depends on the achievement of targets linked to sustainability, particularly the environment: the interest rates are lower if the Company achieves its targets, and higher if it does not (see the other positive impact financings in *Investments and financing with a positive impact*, Commitment 1).

SLLs are being introduced in increasingly diverse geographic areas. BNP Paribas contributed to a first-of-its-kind in South Africa by participating in the £120 million SLL for Motus Holdings Limited, an automotive company; the interest on this loan is linked to the Company's water and energy consumption.

A EUR 2 billion green credit line of credit has also been syndicated for the Belgian chemical group Solvay. The cost of this loan is linked to a targeted reduction in its greenhouse gas emissions of 1 million tonnes by 2025.

According to Dealogic, BNP Paribas was the 2nd largest global player in green loans in 2019.

An increasingly broad portfolio of financial products to support the transition

In general, the Group is continually expanding its range of financial products linked to the energy transition for its corporate clients. Various innovative products were launched in this respect in 2019, including:

- a EUR 174 million foreign exchange risk hedging contract for Spanish wind energy company Siemens Gamesa, linked to its ESG score as defined by the non-financial rating agency RobecoSam. This transaction reduces its exposure to foreign exchange risk on sales of its offshore wind turbines in Taiwan, while incorporating an ESG performance indicator in the rate. Failure to achieve the annual ESG score will trigger a sustainability premium which BNP Paribas has pledged to reinvest in forestry projects;
- a EUR 500 million Schuldschein (a German variable or fixed rate loan instrument) for Austrian company Lenzing AG, the leading producer of wood-based cellulose fibres, linked to its sustainability performance as determined by the non-financial rating agency MSCI. This MSCI rating will depend, amongst other things, on the Company's environmental performance (CO_2 and sulphur emissions, reduction of waste water pollution, etc.).

(1) These amounts are calculated according to the "apportioned value basis" method of distributing fixed income products.

Financial innovation supporting the transition

Since 2015, BNP Paribas has launched 10 climate indices raising over EUR 2.75 billion (including EUR 750 million in 2019). These solutions offer investors a financial return while enabling them to contribute to the energy transition. In 2019, several innovative products were launched:

- THEAM Quant Europe Climate Offset, the first French UCITS (Undertakings for the Collective Investment in Transferable Securities) with a carbon offset mechanism. The objective of this fund is to combine the financial returns of the European equity market with positive impact in terms of climate change mitigation and adaptation;
- since September 2019, BNP Paribas has combined the marketing of structured products indexed to an ESG index with the planting of trees in France by Reforest'Action. One tree is planted for every EUR 1,000 invested. By the end of 2019, 750,000 trees had been planted.

USING THIRD-PARTY ASSET MANAGEMENT TO SUPPORT THE ENERGY AND ENVIRONMENTAL TRANSITION

Exercising voting rights to adopt resolutions in favour of the energy and environmental transition

BNP Paribas Asset Management, the Group's asset management subsidiary, uses its voting rights in various companies to adopt resolutions in favour of the energy transition. BNP Paribas Asset Management is one of the world's most active asset managers in this area. The NGO Majority Action published a report entitled "Climate in the boardroom: How asset manager voting shaped corporate climate action in 2019". This reviews the actions of the world's 25 largest asset managers to make major energy companies in the United States of America more accountable in the fight against climate change. The report shows that BNP Paribas Asset Management aligns its commitments to tackling climate change with its voting. The Group's subsidiary is one of the asset managers who supported more than 95% of shareholder proposals analysed in the study, voting for improved emissions reporting and emissions reduction plans, transparency on political lobbying by companies, and governance reforms to improve accountability to shareholders in the long term.

Third-party asset management supporting the energy and environmental transition

In addition to its carbon risk management system (see *Systematic integration and management of Environmental, Social and Governance (ESG) risks*, Commitment 3), BNP Paribas Asset Management offers a diversified range of green funds invested, in particular, in alternative energies and energy efficiency. At 31 December 2019, they represented EUR 11.6 billion in outstandings.

FULLY SUPPORTING CORPORATE CLIENTS IN THEIR ENERGY AND ENVIRONMENTAL TRANSITION

Climate change has become a systemic issue for businesses. The Group proposes supporting its clients throughout their energy and ecological transition strategy, which can range from efforts to reduce their energy consumption (energy efficiency), to sourcing clean energy and offsetting their residual greenhouse gas emissions.

Support for SMEs in Domestic Markets

In France, French Retail Banking offers solutions to support its corporate clients in the energy and ecological transition. A broad-based solution has been developed jointly with the Group's other business lines – Arval, BNP Paribas Rental Solutions and BNP Paribas Leasing Solutions, and the energy savings partner Économie d'Énergie (EDE) – to reduce energy consumption in three of the Company's areas of operation: real estate, transport and mobility, and movable assets. At end-2019, the entity's support for the energy transition of French SMEs stood at EUR 2.7 billion.

In Belgium, through its "Sustainable Business Competence Centre" (SBCC), BNP Paribas Fortis provides expertise and support to its SME clients in order to design and finance infrastructure for the production of renewable energy or to improve the energy efficiency of their facilities. Its aim is to support corporate clients in their transition towards a sustainable business model that addresses climate change.

Arval and BNP Paribas Leasing Solutions: greener vehicles for their clients

If 2018 was the year when Arval defined its products and services for the energy and environmental transition, 2019 was the year when they were brought to market. At the end of 2019, the amount of hybrid and electric vehicle outstandings was around EUR 1.3 billion at Arval, up more than 60% from the end of 2018.

In Belgium, for example, Arval partnered with energy supplier Engie to set up Numobi, an integrated electric vehicle leasing service. This provides a complete package, covered by a monthly subscription, for businesses and individuals who opt for electric mobility. It consists of the long-term lease of an electric car, a charging point installed at home and at work, a charging card, maintenance and insurance via lease finance.

The BNP Paribas Leasing Solutions subsidiary has also developed a specific solution for sustainable mobility by financing electric vehicle charging points. By offering this service to companies, the subsidiary intends to encourage the take-up of low-carbon vehicles, expand the network of charging stations, and accelerate the energy transition.

BNP Paribas Real Estate Services, offering companies responsible real estate

In 2019, BNP Paribas Real Estate, 100% of whose commercial real estate business has received environmental certification (achieving the two highest levels of certification), is ranked fourth in the top 10 French low-carbon real estate developers. Five of its projects are in the process of obtaining or have already obtained the BBCA (Bâtiment Bas Carbone Construction (low carbon building construction)) label, awarded to buildings with an exemplary carbon footprint. In 2019, the entity also scored 64/100 overall (gold medal) and was in the top 7% of real estate companies assessed by Ecovadis, the CSR rating platform for suppliers.

In Germany, BNP Paribas Real Estate Property Management offers its clients green energy contracts to reduce their emissions and costs.

Supporting businesses in the shift towards carbon neutrality

Beyond efforts to reduce global greenhouse gas emissions, net carbon neutrality must be achieved to meet the objectives of the Paris Agreement. This involves offsetting residual carbon emissions (notably through carbon sequestration in soils and plants).

With this in mind, in 2018 BNP Paribas created the social business ClimateSeed, a voluntary carbon offset platform which connects organisations looking to offset some or all of their residual greenhouse gas emissions with carbon sequestration project developers. A year after its launch, 31 project developers selling carbon credits, representing 5.5 million tonnes of carbon dioxide equivalent, are on the platform. In addition to BNP Paribas, ClimateSeed is already working with the UIC[(1)], Mediaperformances, Julhiet Sterwen, Willis Re and Utopies, to name but a few. A partnership with Paris Aéroport has also been agreed: special terminals have been installed at Orly and Roissy Charles de Gaulle airports so that travellers who want to offset their carbon emissions can do so by making a financial donation to environmental and community projects.

ClimateSeed, which has also been certified by Bertrand Piccard's Solar Impulse Foundation, has signed up to the six standards recognised by the IFC[(2)] (a financial institution affiliated to the World Bank Group) for the carbon offsetting of its green buildings programme, and has received several awards: 1st prize in the "Social, sustainable and responsible banking" category at the Customers Insight and Growth Banking Innovation Awards 2019, and the RB Innovation Award 2019 from the Revue Banque, in partnership with the French Banking Federation (FBF).

HELPING PERSONAL BANKING CUSTOMERS LOWER THEIR ENERGY CONSUMPTION

The Group is continuing to expand its offering to help individual customers improve the energy efficiency of their homes, via dedicated products or partnerships with industrial players. The Group has undertaken several initiatives to help its customers finance work to improve the energy efficiency of their homes and buy less polluting vehicles.

Retail Banking support

In 2019, French Retail Banking launched the Auto Écologiques and EnergiBio loans:

- the Auto Écologiques loan is a form of consumer credit used to purchase cars eligible for the 2019 conversion premium. In 2019, 1,057 Auto Écologiques loans were granted for a total of EUR 27 million;
- ÉnergiBio is a form of consumer credit used to finance energy retrofitting work. In May 2019, the ÉnergiBio rate was set at to 1%, in line with the Auto Écologique loan.

In Belgium, BNP Paribas Fortis offers green retail mortgages to facilitate work to reduce home energy consumption for both new constructions and renovations. At the end of 2019, these green retail mortgages totalled EUR 3.6 billion.

In the United States, Bank of the West offers a discounted rate for some real estate loans to encourage energy retrofitting.

Consumer loans to finance more sustainable goods

BNP Paribas Personal Finance, a subsidiary specialising in consumer credit, is developing innovative products to help its customers finance the purchase of less polluting vehicles or work to make their homes more energy efficient.

In the mobility sector, this translates as partnerships with car manufacturers, particularly in France and the UK, to improve electric vehicle solutions, for example by including home chargers.

In the housing sector in France, the joint subsidiary of EDF and BNP Paribas Personal Finance, Domofinance, which specialises in the financing of energy efficiency in customers' homes, financed 41,250 projects in 2019. Outstanding Domofinance loans total more than EUR 1.2 billion.

BNP Paribas Personal Finance has formed similar partnerships elsewhere in Europe, for example with Innogy in Poland, where 10,000 installations were financed in 2019. In addition, 36,900 energy efficiency loans were handled by BNP Paribas Personal Finance France in 2019, with a total value of EUR 0.9 billion. Overall, the subidiary's energy transition book in France totals EUR 2.1 billion.

In the UK, BNP Paribas Personal Finance has unveiled several innovative propositions including: a platform for connecting customers with installers (certified by TrustMark, a government body), and a partnership with the energy company E.ON, resulting in a product that combines an audit of energy efficiency improvements with financing of the work.

Contributing to climate change adaptation efforts

In addition to its efforts to help reduce greenhouse gas emissions, BNP Paribas is also involved in efforts to adapt to the already tangible effects of climate change, particularly through microfinance projects (see *Products and services that are widely accessible*, Commitment 7).

(1) International Union of Railroads.

(2) International Finance Corporation.

Donations from the Group's employees, matched by the Bank, are used to finance initiatives carried out by the NGO partners of the Rescue & Recover Fund for inhabitants of regions particularly vulnerable to the consequences of climate change, or directly affected by those consequences. This was particularly the case for victims of Cyclone Idai in Mozambique in March 2019, and victims of the fires that devastated Australia in late 2019 and early 2020 (See *Corporate philanthropy policy focused on the arts, solidarity and the environment*, Commitment 9).

SUPPORTING THE ROLE OF WOMEN IN THE FIGHT AGAINST CLIMATE CHANGE

While many studies show that women bear the brunt of the consequences of climate change, they can also provide solutions to effect the necessary change. As a Strategic Member of the "Women & Climate" Daring Circle of the Women's Forum, BNP Paribas worked on the development of the Charter for Commitment "Accelerating inclusion: Women leading climate action" and was one of its first signatories in June 2019. The aim is to encourage governments, local authorities, businesses, associations and individuals to commit to inclusive climate initiatives.

The role of women in the fight against climate change is also the cornerstone of the Group's commitment to the One Planet Fellowship, an initiative of AWARD[1]. This seeks to support more than 600 researchers, more than half of them women in work on resilience and techniques for adapting to climate change which is already affecting Africa. This five-year programme has a budget of USD 15 million.

In Senegal, where women account for more than 70% of workers in the agricultural sector, BNP Paribas has contributed USD 1.8 million (of a total of USD 7 million) to a UN Women AgriFed programme to empower 30,000 women rice entrepreneurs through climate-resilient agriculture.

Lastly, more than half of the research projects supported by the BNP Paribas Foundation between 2010 and 2018 have at least one female researcher working on the project.

ACTIVELY CONTRIBUTING TO THE TRANSITION TO THE CIRCULAR ECONOMY

BNP Paribas is committed to developing the circular economy by using three mechanisms:

- financing actors in the circular economy, particularly those who innovate. BNP Paribas has for many years supported actors in the circular economy, particularly in the field of waste management, from the largest manufacturers in the sector to innovative social enterprises;
- developing the sharing economy through lease finance;
- engaging in the context of its own operations (see *Reduce the environmental impacts of our operations*, Commitment 11).

Developing the sharing economy through lease finance solutions

The leasing offer proposed by the Arval and BNP Paribas Leasing Solutions subsidiaries is a service based on the use, rather than the ownership, of an asset, thus optimising the use of assets and taking into account the whole life cycle of their assets. In order to broaden its approach, the Group has implemented several projects, such as improving financing solutions for extending equipment life cycles (rental solutions for new and used equipment, recycling and end-of-life).

In France, BNP Paribas Leasing Solutions offers a range of services relating to the leasing of low-carbon vehicles, such as natural gas-powered lorries, support for customers regarding their economic and environmental performance, LEDs with a long-term leasing offer and "green real estate leasing" to encourage clients to select energy efficient buildings. In 2019, the entity signed a contract with Canon Medical Systems Europe to offer its customers leasing solutions that take into account the residual value of their medical imaging devices at the end of the contract. Finance products have also been developed for new types of equipment such as electric vehicle charging points and exoskeletons.

Lastly, 2019 also saw the creation of BNP Paribas 3 Step IT, which offers companies an end-to-end service for managing their technological equipment at each stage of its life cycle. This circular economy model means that 97% of equipment can be reconditioned and then resold at the end of the contract. The remaining 3% is recycled responsibly. This joint venture has been awarded the "Solar Impulse Efficient Solutions" label from the Solar Impulse Foundation.

Launch of a circular economy fund

BNP Paribas Asset Management has launched the first exchange-traded fund (ETF) dedicated to the circular economy, called BNP Paribas Easy ECPI Circular Economy Leaders UCITS ETF. The fund tracks the ECPI Circular Economy Leaders Equity Index. It allows investors to gain exposure to the performance of 50 international large caps selected for their active participation in the economic model based on the circularity of goods, materials and commodities.

Structured partnerships for the circular economy

In order to move forward and innovate on circular economy, BNP Paribas Leasing Solutions is working within the Ellen MacArthur Foundation's Circular Economy 100 (CE100) programme to find solutions to the challenges posed by this new economy.

In France, the Group also joined the Institut National de l'Économie Circulaire (INEC) in 2019. It participated in the working group on indicators for financing circular economy projects, set up to foster the emergence of robust and relevant analytical and quantification tools for the circular economy in the financial sector.

(1) African Women in Agricultural Research and Development.

From 18 different business sectors, 33 members of AFEP[1]. have adopted a voluntary circular economy policy with 100 actions covering a wide range of themes. BNP Paribas supported this initiative by refining its processes for identifying contributing firms and offering them tailored financing. The Bank is also committed to developing financial solutions to support the sharing economy. More specifically, the Group is seeking to limit its direct environmental impacts by purchasing fewer physical goods, not only paper but also single-use plastics (see *Green Company For Employees (CG4E): a global employee commitment* in *Reduce the environmental footprint of our own operations,* Commitment 11). It plans to reduce all its waste, to recycle wherever possible, and to monitor the associated data with its employees.

HELPING TO PROTECT BIODIVERSITY AND THE OCEANS

For several years, BNP Paribas has been actively involved in protecting biodiversity through initiatives focusing on its "indirect" impacts, linked to its financing activities (where the most significant issues are at stake), and its "direct" impacts (see *Rigorous management of Environmental, Social and Governance (ESG) risks*, Commitment 3 and *Biodiversity conservation at our sites in Reduce the environmental footprint of our own operations*, Commitment 11).

Ocean conservation, a must for BNP Paribas

BNP Paribas recognises the crucial role of the Ocean for the environment and climate, as well as for people and economies. The Group is also a major player in the financing of global maritime transport. In 2019, BNP Paribas took a public position on the Ocean, summarising the actions it has already taken and making new commitments towards ocean conservation. The Group intends to be actively involved in Ocean conservation, firstly, by providing funding for activities that are sensitive from the point of view of ocean biodiversity and, secondly, by being proactive in supporting initiatives that contribute to a sustainable economy which is respectful of people and marine ecosystems. In line with SDG 14 "Life Below Water", BNP Paribas frames funding in the areas of maritime transport, fisheries and aquaculture, underwater extraction of natural resources, marine renewable energies and land-based activities closely linked to the Ocean. In the maritime transport sector, BNP Paribas has pledged EUR 1 billion to finance the environmental transition of vessels by 2025, for example by supporting dual-fuel liquefied natural gas (LNG) motorisation projects.

Financial support for biodiversity conservation

In Belgium, BNP Paribas Fortis has provided financial support since May 2019 to Natagora and Natuurpunt, two organisations involved in protecting nature and biodiversity, by donating a share of the entry and management fees of one of its main investment funds. Thanks to this financial support, Natagora and Natuurpunt are able to purchase land to expand their existing nature reserves. In the five months between May and the start of October, they received EUR 70,000. This meant that they could manage an additional area equivalent to the size of 10 football pitches.

Urban biodiversity: a key issue for BNP Paribas Real Estate

The real estate sector has a major role to play when it comes to biodiversity: not only must it reduce its impacts, but biodiversity contributes to urban resilience by bringing countless benefits to towns and cities, city dwellings and buildings.

BNP Paribas Real Estate incorporates biodiversity into the projects it designs, renovates, manages and occupies, for example through pre-development environmental audits, the reduction of impermeable surfaces, the creation of vegetated rainwater storage and filtration facilities, and the re-vegetation of sites and buildings. An urban farm has been created on the rooftop of the headquarters building to test new approaches and show them to clients.

In addition, BNP Paribas Real Estate publicly supports several biodiversity initiatives. For example, it has joined the International Biodiversity Property Council (IBPC) and signed the call to action for greener towns and cities.

BLENDED FINANCE: INNOVATIVE FINANCE TO SUPPORT THE ENERGY AND AGRO-ECOLOGY TRANSITION

Rural areas in emerging countries are particularly affected by climate change, deforestation and the loss of biodiversity. BNP Paribas is developing innovative financing solutions to facilitate projects that tackle these complex issues by involving a wide variety of actors. Blended finance is one of the most promising ways of mitigating the associated risks, by combining public finance with private finance.

Sustainable Finance Facilities (SFF)

BNP Paribas has a key agreement in place with the United Nations Environment Programme (UNEP). The aim is to channel USD 10 billion towards projects that support sustainable growth in emerging countries by 2025.

Accreditation with the Green Climate Fund

BNP Paribas has obtained accreditation from the Green Climate Fund (GCF), which encourages funding for low-carbon, climate-resilient projects. In particular, this fund will help to direct growing funding to the most under-developed countries, small islands and African states.

(1) Association française des entreprises privées (French employers' association).

GEFF[1] programme in Morocco with the EBRD[2]

In Morocco, the subsidiary BMCI has signed a partnership agreement with the European Bank for Reconstruction and Development (EBRD) for the Green Economy Financing Facility (GEFF) Morocco programme. BMCI will thus be involved in supporting the scheme's green projects dedicated to energy efficiency, renewable energies, management of resources such as water, and waste management. In this context, BMCI has been given a EUR 20 million loan to support private investment by companies with a positive environmental impact.

Agreement with the European Investment Bank in Poland

In Poland, BNP Paribas Bank Polska has signed an agreement with the European Investment Bank (EIB) and is receiving funding under the European Union's ELENA programme to support thermal renovation in multi-occupancy buildings.

COMMITMENT 11: REDUCE THE ENVIRONMENTAL IMPACT OF OUR OPERATIONS

GREEN COMPANY FOR EMPLOYEES (GC4E): A GLOBAL EMPLOYEE COMMITMENT

Since 2018, the Green Company for Employees (GC4E) programme has accelerated the reduction of all direct environmental impacts of BNP Paribas with the participation of all employees. Two priority actions were launched in 2019, with the publication of two dedicated policies: one concerning the campaign to abolish petrochimical sourced single-used plastics, the other the promotion of sustainable mobility. In France, for example, the Group removed single-use plastic items from supply catalogues in 2019. Disposable and plastic beverage and catering containers and accessories have already been removed from company cafeterias and restaurants in many cities and countries, *e.g.* France, Hong Kong, Brazil, London and New York. The Group's range of promotional merchandise is also being overhauled to eliminate single-use plastic.

In addition, BNP Paribas took part in the World Cleanup Day for the first time in 2019, with several hundred of its employees worldwide collecting waste in Asia, America, Africa and Europe.

From a mobility point of view, BNP Paribas is gradually rolling out electric charging capabilities at its sites, particularly in France, the UK and the United States of America. Where appropriate, it is also obtaining licenses locally for carpooling schemes, to complement the global service sharing site for employees developed by HR. Lastly, a Green Friday was held in France to give employees cheap access to green cars and bikes and thus encourage sustainable mobility.

ONGOING EFFORTS TO SAVE ENERGY AND IMPROVE ENERGY EFFICIENCY IN OUR OPERATIONS

Each year, the Group redoubles its efforts to reduce the environmental footprint associated with its operations. Specific targets have been introduced and are regularly increased to cut energy, paper and water consumption and reduce greenhouse gas (GHG) emissions and waste, while improving recycling wherever possible.

Detailed environmental reporting

The monitoring of these targets and management of the associated actions is ensured via environmental reporting. This comprises around 40 indicators and covers the 20 countries where the Group has the largest number of employees and therefore the greatest environmental impact. These represent 90% of full-time equivalent (FTE) personnel managed by the Group as of 31 December 2019. The results are extrapolated across the entire Group and are used to calculate the environmental data reported in this section. In 2019, 67 entities received quantified data from Group CSR function on their consumption and targets compared with those of the Group as a whole, following data collected during the previous environmental campaign. This guidance tool enables each entity to make improvements so as to achieve the objectives of the environmental performance indicators.

7

(1) Green Economy Financing Facility.

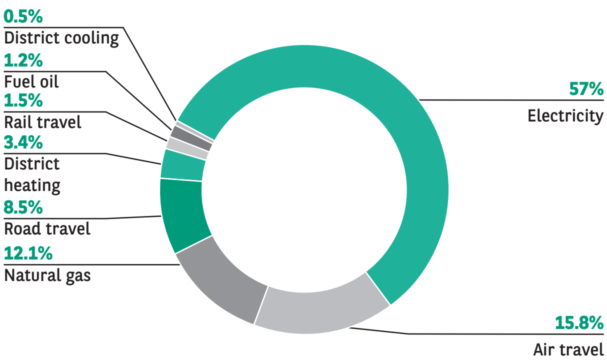
(2) European Bank for Reconstruction and Development.

SITUATION FOR THE MAIN ENVIRONMENTAL INDICATORS AS OF 31 DECEMBER 2019:

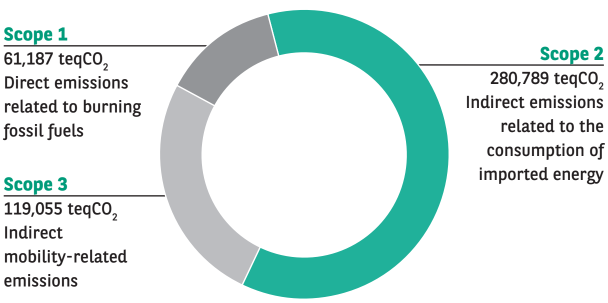
Indicators	2012	2016	2017	2018	2019	2020 Objective
Greenhouse gas emissions (teqCO_2/FTE)	3.21	2.72	2.54	2.45	2.32	2.41
Paper consumption (kg paper/FTE)	165	122	113	97	86	94

GHG emissions are measured by converting the energy consumed in buildings and employee business travel into tonnes of CO_2 equivalent teqCO_2, including all six greenhouse gases covered by the Kyoto protocol). 74% of these emissions are due to the energy consumption of buildings including IT and 26% to business travel. In 2019 the Group emitted 461,030 teqCO_2, a 7.06% reduction on 2018. There are three mechanisms to reduce them: energy efficiency of buildings, IT equipment, and optimising business travel.

BREAKDOWN BY TYPE OF GREENHOUSE GAS EMISSION



BREAKDOWN OF THESE EMISSIONS BY ISO/GHG PROTOCOL SCOPE IN TeqCO_2



The nature of its activities means that the Group is not a significant source of noise pollution or any other specific form of pollution.

A large number of ISO 14 001 certifications

In 2019, 22 separate ISO 14001 certificates were in effect within the Group. This number establishes BNP Paribas as a world leader in the banking/insurance sector for Environmental Management Systems (EMS). Overall 76,000 employees work in offices covered by an environmental management system.

Efforts recognised by third parties

In 2019, these initiatives together enabled the Group to obtain a score of A- from the Carbon Disclosure Project (CDP) and 100/100 for its environmental reporting as part of the RobecoSam 2019 non-financial rating. This is a testament to the quality and transparency of the Group's reporting.

USE OF LOW-CARBON ELECTRICITY

To continue reducing its environmental impact, the Group is increasingly turning to low-carbon electricity in all countries where this is possible. Renewable electricity accounted for 35% of the Group's total electricity bill in 2019 compared to 32% in 2018. It came either from purchase of renewable electricity certificates, or from direct consumption of renewable energy produced by the Group's buildings. The share of low-carbon electricity as a whole was 72% in 2019.

OFFSETTING RESIDUAL EMISSIONS

Each year, BNP Paribas offsets residual greenhouse gas emissions generated during the previous year for the Group as a whole. After taking into account the additional purchases of low-carbon electricity, these emissions amounted to 390,215 teqCO_2 in 2018. In 2019, these emissions were offset via three projects:

- the Kasigau project, which the Group has supported since 2017. This conservation and restoration programme, which covers 200,000 hectares of forest in Kenya and is managed by the NGO Wildlife Works, also funds access to healthcare, water and education for local inhabitants;
- the other two projects were selected via the ClimateSeed platform (see *Supporting companies towards carbon neutrality*, in *Enabling our clients to transition to a low-carbon economy respectful of the environment*, Commitment 10). The first project chosen consists of drilling drinking water wells in Malawi, thereby reducing the logging of trees previously used as fuel for water sterilisation. Overseen by the NGO United Purpose Malawi WASH, the project tackles deforestation and thus dramatically improves people's lives. The latest project is in Indonesia and consists of an initiative to restore and protect tropical peat bogs covering more than 150,000 hectares of swamp forest in central Kalimantan. In addition to protecting more than 40 endangered species of fauna and flora, the project helps indigenous peoples fight the devastating forest fires that occur during the dry season.

As a result of all the actions described above – which enable it to cut its energy consumption, use clean energy and offset its residual emissions – **since 2017, BNP Paribas has been carbon-neutral within its own operations (covering its direct emissions, its indirect emissions relating to its energy supply and its indirect emissions relating to business travel).**.

BIODIVERSITY ACTIONS

Biodiversity conservation at the Group's sites

Recognising that biodiversity is now under serious threat, BNP Paribas encourages various initiatives at its own sites to help protect the environment, promote the greening of urban areas and involve its employees in collective efforts to improve biodiversity. This is the case, for example, at its two international training centres in Singapore and Louveciennes, France, where floral and animal biodiversity are being successfully managed.

A prime example of this approach is the "urban farm" which BNP Paribas Real Estate created in spring 2018, covering an area of more than 640 m² on the roof of its headquarters in Issy-les-Moulineaux, France. Serving as a laboratory, community allotment, show garden for clients and relaxation space, experimenting with these urban crops has forged a community of employee-gardeners on the 26 dedicated plots which are home to nearly 70 plant species.

Responsible procurement and reduce waste production

The aim of the paper policy is to **increase the share of responsibly sourced paper to 80% by 2020** (from recycling or sustainably managed forests, *i.e.* more than 50% recycled or PEFC[1] or FSC[2] certified). In 2019, 72% of paper was sustainable, compared with 62.5% in 2018, thus helping to protect forest ecosystems and their biodiversity.

In addition, the Group is committed to making progress each year on the proportion of **waste recycled per employee** (mostly paper) and on the quality of these data. Year on year, the data is becoming increasingly complete and detailed. The total waste collected, calculated for 2019, is 33,905 tonnes, or 170.5kg/FTE. 21% of the total volume of waste is recycled, or the equivalent of 26.7kg per employee.

COMMITMENT 12: ADVANCE AWARENESS AND SHARING OF BEST ENVIRONMENTAL PRACTICES

In addition to its commitments to support its customers in the energy and environmental transition and to minimise its direct environmental footprint, BNP Paribas is actively involved in the public debate on these issues, helping to improve and disseminate knowledge and best environmental practice within civil society.

SUPPORT RESEARCH AND DEVELOPMENT ON CLIMATE CHANGE AND BIODIVERSITY

Support for innovative start-ups in the energy and ecological transition

The energy transition also involves developing innovative technologies. To this end, in late 2015 the Group pledged to invest EUR 100 million of its own funds by 2020 in innovative start-ups in the energy and ecological transition sector and thereby support their growth.

By the end of 2019, the Group had already committed EUR 56 million of its own funds to invest in 10 start-ups specialising in the energy and ecological transition and in three investment funds. Of this, EUR 20 million was invested in 2019.

The start-ups supported in 2019 include Sierra Energy, which converts all types of waste into energy without combustion, and EkWateur, a French company supplying green and renewable energy (electricity and biomethane) to households and local authorities.

The Group also helps start-ups involved in the energy and environmental transition to grow by launching on the stock market. In 2019, Portzamparc BNP Paribas, a specialised subsidiary, supported several firms in this sector with their initial public offering. These include: Hoffmann Green Cement Technologies, established in 2014, which manufactures low-carbon cement; and BoostHeat, which specialises in efficient and sustainable heating solutions.

Support research and develop knowledge on climate change and biodiversity

The BNP Paribas Foundation supports scientific research programmes in the fields of climate change and biodiversity. Two corporate philanthropy programmes benefit from this in particular:

- Launched in 2010 by the BNP Paribas Foundation, the Climate Initiative programme was expanded in 2019 to include biodiversity issues and has become the Climate & Biodiversity Initiative. It has already provided EUR 18 million for 27 research projects run by researchers, academics and engineers. Between 2020 and 2022, the BNP Paribas Foundation will showcase the nine winning projects of its fourth call for projects launched in 2019. This focused on various issues linked to the interactions between climate and biodiversity, such as the impact of melting glaciers on global biodiversity, the resilience of coastal ecosystems to extreme weather events, and the reforestation of disturbed ecosystems;

(1) *Forest Certification Recognition Programme.*

(2) *Forest Stewardship Council.*

- In 2019, BNP Paribas maintained its commitment to the One Planet Fellowship programme. With a five-year grant of USD 15 million, this philanthropy programme is supported by the BNP Paribas and Bill & Melinda Gates Foundations, the European Commission and the International Development Research Centre (IDRC, Canada). It is run by AWARD (ICRAF, Kenya) and the Agropolis Foundation. Its ambition is to form an intergenerational network of researchers, future leaders in the fight against – and adaptation to – climate change in Africa. In 2019, the One Planet Fellowship launched two calls for applications for up-and-coming researchers specialising in this area. In total, 45 winners from 12 African countries were chosen in the first of these calls for projects in 2019. 14 countries are now eligible: Morocco, Algeria (both added this year), Benin, Burkina Faso, Tanzania, Togo, Zambia, Nigeria, Mali, Malawi, Senegal, Kenya, Ethiopia and Republic of Ivory Coast.

Overall, the BNP Paribas Foundation supported more than 250 researchers in 2019 through the Climate & Biodiversity Initiative and One Planet Fellowship programmes.

RAISING AWARENESS AMONG INTERNAL AND EXTERNAL STAKEHOLDERS

BNP Paribas believes that the energy and ecological transition can only succeed if all stakeholders (businesses, government, associations, citizens/consumers) work together to bring about change. Therefore, the Group has entered into discussions on these issues with all its stakeholders and is contributing to the joint awareness-raising and training effort.

Employees, the Group's best climate and biodiversity ambassadors

The Climate Collage, a climate change awareness-raising game in the form of collective intelligence workshops, is now being rolled out across the various Group entities. The aim of the game is to provide a systemic view of the issues around climate change and their consequences. Some entities, such as BNP Paribas Fortis, have also decided to use the game as a means of broaching these subjects with their clients, while others use it internally to improve employee awareness. The Climate Collage will continue to be rolled out in 2020, accompanied by a kit which outlines the Group's position on the issue and its proposed solutions.

In addition, some of the Group's subsidiaries organise team-building activities around tree planting for their employees. In 2019, nearly 4,000 trees were planted by BNP Paribas Personal Finance employees: more than 1,500 trees with the *Plantam Fapte Bune* association in Romania, the first 1,750 orange and pomegranate trees of a long-term operation in Sicily by Findomestic, and 460 pines in Ocoyoacac, on the outskirts of Mexico City.

Raising client awareness through high-level presentations

BNP Paribas increasingly arranges specific meetings with its clients on the subject of the energy and environmental transition. In 2019, these types of events were held in 11 countries, bringing together 380 clients (companies and investors) to hear Group speakers, client representatives or other public figures, such as the Hungarian Secretary of State for Energy and Climate, at the event held in Budapest.

The Group also convened more than 500 clients in Singapore for its 4th Sustainable Finance Forum (SFF) in Asia. BNP Paribas Fortis invited 80 clients to attend a seminar in Oslo, a city that is leading the way in zero emissions. The motivation for this trip was to encourage clients to expedite the energy and ecological transition of their own business by showing them new technologies, such as carbon capture and the mass roll-out of electric vehicles.

Conferences to publicise research funded by the BNP Paribas Foundation

As well as funding research, the Climate & Biodiversity Initiative programme of the BNP Paribas Foundation is intent on promoting widespread awareness of the research projects it supports. Thus, since 2010, numerous conferences, exhibitions and other public events have been organised to heighten awareness of these issues among employees and the general public.

COP25: showcasing the Group's actions in the fight against climate change

Several representatives from BNP Paribas addressed COP25 in Madrid. These experts took part in some 40 events covering various topics, including Ocean conservation (one of the key themes of this COP), carbon neutrality, climate risk management, sustainable finance, the energy transition, and the EU taxonomy for activities that can be considered "green".

The BNP Paribas Foundation supports the Global Youth Video Competition, a UNFCCC initiative aimed at young people engaged in the fight against climate change. This year, the awards presentation for the fifth competition took place at COP25. Entries were received from 114 different countries, with 404 short films submitted by young people between the ages of 18 and 30. The judges shortlisted 20 films in each category. These were then uploaded to YouTube to be voted on by the public, with the 60 shortlisted films being watched more than 500,000 times.

Broadcasting our expertise via public reports and presentations

Our experts conduct research into changing markets, particularly in relation to the energy transition. In 2019, Mark Lewis, Global Head of Sustainability Research at BNP Paribas Asset Management, published a study ("Wells, Wires, and Wheels… – EROCI and the Tough Road Ahead for Oil"). This looked at the transport sector and compared the oil industry and internal combustion engine vehicles with renewable energy and electric vehicles. The study shows that oil needs a break-even point of USD 10-20 per barrel over the long term to remain competitive in the automotive sector.

TAKING AN ACTIVE PART IN PARTNERSHIPS AND COLLECTIVE INITIATIVES

Participation in the work of Entreprises pour l'Environnement and publication of the study on carbon neutrality in France

In 2019, Jean-Laurent Bonnafé, Director and Chief Executive Officer of BNP Paribas, was appointed Chairman of the environmental business association EpE (Entreprises pour l'Environnement) for a three-year term. In this role, he has been able to showcase and promote EpE's actions and reports in his public statements. In 2019, these actions focused on the publication of the study "ZEN 2050 – Imagining and Building a Carbon-Neutral France"[1], which makes 14 recommendations for action to be taken as soon as possible to ensure that the goal of carbon neutrality by 2050 remains feasible.

Participation in the Hydrogen Council to prepare hydrogen development for the energy and ecological transition

BNP Paribas is convinced that hydrogen produced from clean energy can play an important role in the energy and ecological transition and officially joined the Hydrogen Council in early 2020 and attended the G20 side event in Japan in 2019. The Hydrogen Council brings together leading multinationals in the energy, transport and industrial sectors. These companies share the same long-term vision: that hydrogen can drive the energy and ecological transition. The Hydrogen Council seeks not only to accelerate investment in development and commercialisation in the hydrogen and fuel cell sector, but to encourage key stakeholders to increase their support for hydrogen in the future energy mix.

Other partnerships

BNP Paribas has also partnered with various stakeholders to raise awareness and promote solutions to climate and environmental challenges, including:

- by approving, along with 30 other bank signatories of the Principles for Responsible Banking (PRB), the UNEP FI's Collective Commitment to Climate Action. These banks are committed to aligning their loan portfolios to reflect and finance the low-carbon and climate-resilient economy necessary to achieve the objectives of the Paris Agreement;
- by participating in the analysis by Group experts of the solutions proposed by the Solar Impulse Foundation, whose aim is to choose 1,000 solutions that protect the environment while being viable, and to award them the "Solar Impulse Efficient Solution" label;
- by launching in 2019 a three-year partnership with Craig Neeson, award-winning film maker, narrator and ambassador for sustainable development, director of the film *A Plastic Ocean*. The aim of this partnership is to raise awareness of various environmental issues (such as Ocean pollution and the climate crisis) by giving presentations, for example at the 12 events organised by BNP Paribas in 2019.

(1) Available online at http://www.epe-asso.org/zen-2050-imaginer-et-construire-une-france-neutre-en-carbone-mai-2019/.

7.6. Duty of care and Modern Slavery Act and human trafficking statement

DUTY OF CARE: 2019 BNP PARIBAS' VIGILANCE PLAN

REGULATORY FRAMEWORK

Law no. 2017-399 of 27 March 2017 on the Duty of care of parent companies and of companies using sub-contractors applies to the Group as a whole and requires a vigilance plan to be established and implemented to identify and prevent the risk of serious violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment. Starting with the 2018 financial year, the law also requires the preparation of a report on the effective implementation of the Group's vigilance plan.

GOVERNANCE

Initiated and overseen by Group Management, the Corporate Social Responsibility (CSR) policy is a strategic issue for BNP Paribas. It reflects a commitment at the highest level of the Company, to combine performance, responsibility, ethics and transparency. CSR objectives were included in the Group's 2017-2020 business development plan.

Actions related to Group vigilance measures are defined by the CSR Function and jointly designed with the relevant stakeholders concerned in the main businesses and functions: Domestic Markets, International Financial Services, Corporate & Institutional Banking, Group Human Resources, Group Strategic Sourcing, Compliance, Risk and Legal. These actions are intended to cover all of the Group's businesses, functions and countries of operation. In 2019, deployment of these previously defined action plans has continued, under the auspices of the Heads of the relevant businesses and functions, who are members of the Group Executive Committee.

The Group is committed to promoting compliance with a number of the principles and standards that underpin its operations, such as the United Nations Sustainable Development Goals (SDGs), the 10 principles of the United Nations Global Compact, and the standards defined by the International Labour Organization (ILO).

For the analysis of environmental, social and governance (ESG) risks, the CSR Department relies on the various businesses, which constitute the first line of defence. The Group CSR Function supports businesses in the most complex analyses, providing its thematic and industry expertise. The Risk Management Function acts as a second line of defence for CSR assessments as part of the credit and investment decision-making process. Within its risk appetite framework, the Group has, since 2014, provided the breakdown of the electricity and energy mix which it finances, which are lower in carbon that the global mix.

Executive Management made a series of commitments on the environment as of 2011, and on human rights as of 2012, by signing the Declaration of Human Rights. In 2016, the Group's management reiterated its strong commitment to respecting human rights and protecting the environment through the publication of its Code of conduct applicable to all employees around the world. The latest update was published in 2018.

Furthermore, the purpose of the Group's ethics warning system is to enable any BNP Paribas employee to report a proven breach – or a suspicion of such a breach – of the Code of conduct, of a policy or of a Group procedure or regulation, not only to their line management, but also, alternatively, to the compliance team of the entity to which they belong, or of a higher level. Employees have the right to report wrongdoing internally and may not be punished in any way for doing so in good faith.

Any suspicion by a BNP Paribas employee of serious or potentially serious violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment, may be reported under this ethical alert system.

OUR VIGILANCE APPROACH

Scope

As part of the preparation of its vigilance plan, BNP Paribas conducted, consistent with its commitments, risk mapping and a review of its existing risk assessment and control policies and tools, on a scope consistent with the text of the law.

This scope includes employees (Human Resources (HR)), suppliers and sub-contractors (Group Strategic Sourcing (GSS)) and the main business lines within the three principal BNP Paribas divisions (Domestic Markets, International Financial Services, Corporate & Institutional Banking).

Risks taken into account in the development of different mapping exercises

In line with its CSR commitments, the Group has included in its vigilance approach the risks of serious violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment, and the following issues in particular:

- issues related to human rights and fundamental freedoms: child labour, forced labour and human trafficking, non-compliance with the rights of local communities, freedom of association and collective bargaining, exercise of the right to strike, discrimination, failure to respect the rights of local communities, harassment, unfair wages and excessive hours of work;
- issues related to human health and safety: workplace and consumer health and safety;
- environmental issues: air pollution, water pollution, soil pollution, scarcity and depletion of commodities, water scarcity, erosion and soil depletion, waste management, greenhouse gas emissions, degradation of ecosystems and biodiversity.

Systems used to manage these risks

The Group made an inventory of its existing systems, and compared them against the elements required for the preparation of the vigilance plan, ensuring that these existing systems fully covered the main risks for employees, suppliers and banking and financial activities.

Risk mapping covered, *inter alia*, purchase categories for the Group's suppliers, as well as business sectors and operating countries for BNP Paribas banking and financial activities. Analysis grids, in addition to the existing risk prevention systems, were developed and tested.

OUR EMPLOYEES

The Group wants to foster a stimulating work environment in which every person is treated fairly. In particular, the Group places an emphasis on respect, the need to apply the highest standards of professional behaviour, and the rejection of all forms of discrimination. The Group also ensures the safety and security of people in their workplace.

When it implemented its vigilance plan, BNP Paribas ensured that there was adequate coverage of all salient risks[(1)] as well as formalising them in existing Group HR policies.

The Group's diversity and inclusion policy and remuneration principles reaffirm the principle of non-discrimination in the recruitment and professional development of employees up to the Company's highest levels. These policies are supported by the Group HR control plan as well as by a specific alert procedure on discrimination issues via "Discrimination advisers", who can be called upon, in the countries where they exist, by any employee who believes he/she is a victim of discrimination.

- BNP Paribas has also signed the 10 Principles of the International Labour Organisation's Disability Charter, designed to promote the employment and working conditions of people with disabilities. By means of the Global agreement (signed in September 2018 with UNI Global Union), each of the Group's entities has undertaken to implement at least one of 10 commitments from the aforementioned Charter.
- As part of the UN Women HeForShe programme, BNP Paribas is especially committed to advancing gender equality by beginning to better balance male and female representation in roles that historically had a preponderance of female (HR) or male (Global Markets) employees.
- BNP Paribas also supports the United Nations LGBTI Standards of Conduct, unveiled in September 2017 to combat discrimination against LGBTI people at work.

The update of the Code of conduct in 2016 strengthens the Group's commitment to combating harassment, including sexual harassment. The Human Resources Department also introduced an internal procedure in 2018 on how to deal with reports of harassment. Under the Global agreement, this will be implemented in all Group entities, together with measures to support victims.

The European Social Charter, from which derives the European agreement on the prevention of stress at work (which has applied since 2017), the programmes related to the prevention of psychosocial risks and stress at work, the commitment on maternity/paternity, the charter on the balance of professional life and personal life in France and new ways of working all contribute to a better balance of work patterns.

In 2018, BNP Paribas also updated its HR personal data protection policy to apply the provisions of the General Data Protection Regulation (GDPR), which came into force on 25 May 2018, and carries out awareness-raising activities for employees in the territories where the GDPR is applicable.

Occupational risk prevention programmes and occupational health and safety policies are adapted to the specificities of the Group's different business lines; they are described in more detail in paragraph 7.3.

The policies and actions already undertaken by Human Resources will continue to be implemented and monitored over time.

OUR SUPPLIERS AND SUB-CONTRACTORS

Dedicated teams in Group Strategic Sourcing deal with supplier-related ESG risks.

In accordance with the deployment of the Act, BNP Paribas' ESG risk management system for its suppliers and sub-contractors is based on the following elements:

- an ESG risk map covering 13 issues and identifying purchasing categories that carry a significant amount of environmental and social risk;
- a Sustainable Sourcing Charter which sets out the reciprocal commitments of the Group and its suppliers and subcontractors from an environmental and social standpoint;
- standard contractual clauses covering requirements in order to meet environmental and social criteria. Since 2018, they have also included the option of ending contracts if suppliers do not comply with the Group's ESG requirements;
- standard ESG questionnaires used in calls for tenders to assess suppliers;
- supplier risk monitoring rules, targeting certain ESG criteria used during selection, supplemented by monitoring and completed by intelligence in different areas;
- training for the Sourcing business.

Also see Fostering dialogue with stakeholders in *Our strategy*, part 7.1, and *Systematic integration and management of Environmental, Social and Governance risks (ESG)*, Commitment 3.

In France, BNP Paribas as a signatory of the Responsible Supplier Relations Charter promoted by the Business Mediation body of the French Ministry of Economy and Finance, has an independent internal procurement mediator to offer advice in the event of a dispute, whose contact details are provided on the Group's institutional website.

The use of ESG evaluation questionnaires in calls for tenders and the inclusion of their results in the overall evaluation of the supplier form part of the Strategic Sourcing control plan.

In addition, the GSS business has set up an annual reporting process so that the progress made by entities can now be assessed.

(1) "Salient" is the term used by the drafters of the United Nations Guiding Principles Reporting Framework.

OUR BANKING AND FINANCIAL ACTIVITIES

The distribution of financial products and services

The Group has identified two main risks in the distribution of its products and services for individuals: non-discrimination in the access to financial services and the right to privacy (protection of customers' personal data).

To reduce the risk of discrimination in the access to financial services, the Group implements a financial inclusion approach, by supporting microfinance through financing and services provided to specialised institutions, by improving access to credit and insurance, and by supporting clients facing difficulties as because of their disability or their financial situation. In addition to regulatory requirements in relation to the Duty of care, the Group has launched several initiatives that fall under its civic responsibility (see *Products and services that are widely accessible*, Commitment 7).

Moreover, as part of its general policy on managing personal data, BNP Paribas intends to use the best data protection systems available in all the entities and countries where the Group is present (see also *Combat social exclusion and Support human rights*, Commitment 8).

Financing and investment activities

The activities of BNP Paribas customers may involve risks in relation to human rights and fundamental freedoms, human health and safety, and the environment. At the end of 2018, the Group published Responsible Business Principles for its customers, thus reaffirming BNP Paribas's expectation to engage with customers whose business practices demonstrate a high level of governance and responsibility with respect to human rights, fundamental freedoms, human health and safety and the environment.

With a view to limiting the impacts of greenhouse gas emissions and to contributing to the energy and environmental transition, in 2019 the Group announced its decision to reduce its financing of the coal industry to zero from 2030 within the European Union and from 2040 in the rest of the world. The Bank had already stopped financing coal-fired power plants, as well as stakeholders whose main business was related to the unconventional hydrocarbons sector. At the end of 2019, the Group also made a public commitment to protect the oceans, in order to play an active role in protecting marine biodiversity. BNP Paribas also promotes the United Nations heath recommendations, and at the end of 2017 it suspended its financing of and investment in the tobacco industry.

The Group has an exclusion list and a monitoring list. These lists are periodically revised to include, in particular, new situations involving serious harm to the environment or human rights. The exclusion list covers companies that the Group does not wish to maintain commercial relations with.

BNP Paribas had already implemented ESG risk management systems for its financing and investment activities before the Duty of care law came into force (also see *Rigorous management of Environmental, Social and Governance risks (ESG)*, Commitment 3). These systems are notably based on:

- the development of financing and investment policies to regulate sectors with high ESG risks. These policies, which are available on the Group's website, are updated according to regulatory changes, their expected changes, and reports from the operational teams of the Group's businesses;
- the respect of the Equator Principles for major industrial and infrastructure projects. BNP Paribas has been a signatory to the Equator Principles since 2008: they aim to avoid, reduce, mitigate or offset the negative impacts of large industrial or infrastructure projects on communities, ecosystems or the climate;
- the integration of ESG criteria into the "Know Your Customer" process (KYC);
- a progressive integration of ESG criteria into lending and rating policies;
- the development and use of tools to manage and monitor such risks, such as specific questionnaires for activities that have salient risks;
- training on ESG risk management systems for financing business lines and control functions;
- an operational monitoring plan

To ensure that the existing system is adapted to the requirements of the French Duty of Care Act, BNP Paribas uses mapping of the risks to which its clients are exposed that covers all business sectors and all the countries where the clients' legal entities are located:

- for each business sector, the salient risks related to human rights and fundamental freedoms, personal health and safety and the environment were defined according to a methodology for rating the level of sensitivity and occurrence of each risk, that is based on the United Nations Guiding Principles reporting framework. The level of risk inherent in each business sector was then determined based on the presence of salient risks;
- a level of environmental and social risk was defined for each country where the clients of the Group operate on the basis of reference sources from recognised international organisations and NGOs, such as the International Labour Organisation, the World Bank, the United Nations Environment Programme, Human Rights Watch, Transparency International, and the World Resources Institute;
- the risk levels inherent in the sectors and countries where the Group operates were then combined to take into account the clients' legal entities with a high level of environmental and social risk.

2019 RESULTS

In 2019, the action plans previously defined continued to be implemented under the aegis of the Heads of the relevant businesses and functions, who are members of the Group Executive Committee.

Our employees

By the end of 2019, 94% of entities with more than 1,000 employees had already made a commitment to implement at least one of the 10 commitments of the ILO's Business Charter on Disability. The objective included in the criteria of the medium-term incentive plan of more than 7,300 key employees is to reach 100% in 2021. The partnership signed with Handicap International in March 2019 should speed up the implementation of these commitments to enable us to meet this objective.

The Group achieved its initial targets in terms of improving the gender balance of some business lines, with 50% of women in the Graduate & Talent programmes of market activities at the end of 2019. On that date, women accounted for 29% of the Group's Senior Management Position (SMP) population. The target of 31% was included in the criteria of the three-year retention plan of more than 7,300 key employees for the 2019-2021 period.

In addition, the Group was recognised in the 2019 OUTstanding 100 LGBT+ Executives and 50 Ally Executives for three of its executive role models, and in the Human Rights Campaign Foundation Corporate Equality Index 2020, which gave it a score of 100/100 in the United States of America.

The Group is continuing to develop its human rights training for Group employees directly involved in promoting human rights. At the end of 2019, 88% of the employees assigned the training had completed the online awareness module about taking human rights into account in funding decisions (compared with 85% in 2018).

Our suppliers and sub-contractors

At the end of 2019, 2,500 ESG assessments had been carried out (compared with 2,300 in 2018), and almost 1,200 Sustainable Sourcing Charters had been signed by BNP Paribas suppliers.

Regular classroom-based training sessions continued to be held on purchasing from the protected worker sector.

Our banking and financial activities

In 2019, BNP Paribas continued to strengthen its data protection system and increased its network of contacts to more than 100 at the end of 2019, in order to align its processes with the General Data Protection Regulation (GDPR).

Since 2014, the Group has provided a breakdown of the electricity and energy mix that it finances. With 46% fossil sources (gas, coal and oil) and 31% renewable sources (hydro, wind, photovoltaic and other renewables), the electricity mix financed by BNP Paribas has a lower average carbon footprint than that of the worldwide mix, which consisted of 64% fossil sources and 26% renewable sources in 2018 (according to the International Energy Agency (IEA)).

At the end of 2019, the Group's exclusion list and monitoring list for managing ESG risks included 1,087 legal entities (943 excluded and 144 under monitoring), compared with 992 legal entities at the end of 2018. In 2019, the Group's CSR teams were asked to give an expert opinion in the assessment of ESG risks for 2,340 complex and/or sensitive transactions related in particular to financing, new accounts, export support, and other matters, compared to 1,627 transactions the previous year.

Among the in-depth vigilance measures which have been put in place, the business lines tested in 2019, analytical grids in addition to pre-existing systems to provide an in-depth analysis of the Bank's corporate clients operating in countries and sectors identified as sensitive in terms of human rights and the environment.

OUR COMMITMENT TO CONTINUOUS IMPROVEMENT

BNP Paribas' vigilance approach is part of a drive for continuous improvement. As such, the Group will complete, where necessary, its identification, control and management tools for identified risks, and will report on them each year in its Registration document.

MODERN SLAVERY ACT AND HUMAN TRAFFICKING STATEMENT

INTRODUCTION

This Statement[(1)] relates the steps that BNP Paribas has taken to ensure that human trafficking[(2)] and slavery[(3)] are not taking place in its direct operations or supply chains. It also refers to the risk management that the Group has put in place in the context of its financing and investment activities, which govern the potential cases of human rights violations that may affect the activities of its clients. This Statement is for the financial year ended 31 December 2019. The Board of directors and Chief Executive Officer attest annually that the Group complies with this Statement through the information provided by the corporate social responsibility (CSR), Group Strategic Sourcing and Human Resources Departments respectively.

THE BNP PARIBAS GROUP

BNP Paribas is a leading European provider of banking and financial services. It operates in 71 countries and has 198,816 employees.

It holds key positions in its two main businesses: **Retail Banking and Services** (Domestic Markets and International Financial Services divisions, including areas such as Personal Finance, insurance and Wealth & Asset Management) and **Corporate and Institutional Banking** (Corporate Banking, Global Markets and Securities Services). Further information is available on BNP Paribas' business activities and locations in Chapter 1.4 *Presentation of operating divisions and business lines*.

Group purchases amount to around EUR 10.6 billion worldwide, spread over nine procurement categories: Banking Services, General Resources, Market Data, Marketing & Communication, Professional Services, Real Estate, Technology, Transaction Fees and Travel.

MODERN SLAVERY AND HUMAN TRAFFICKING RISKS

It has been clearly proven by multiple sources (including academic studies, field research and media coverage) that all sectors, industries and regions may be affected to differing degrees by this type of serious breach of human rights.

Therefore, modern slavery risk assessment policies must be regularly updated and must consider a range of factors (including the sector, industry and geographical location of the businesses, products and/or services being analysed), in order to address this complex issue as fully and effectively as possible. Therefore, the risk assessment policy which BNP Paribas uses to address the issues of modern slavery and human trafficking also takes into account the very diverse circumstances of its stakeholders.

Risks linked to BNP Paribas employees

The risks of modern slavery and human trafficking in the Group's operations are deemed to be low. There are no published studies on this topic deeming, *a priori*, the banking sector and its employees to be particularly exposed to this type of risk, most being highly qualified professionals.

Risks linked to BNP Paribas suppliers

As a banking Group, BNP Paribas manages a supplier portfolio primarily for operational procurement costs, including advice, IT services, safety, IT equipment, furniture and office supplies, promotional items, IT services, consultancy, cleaning, catering and security. The supply chain can be straightforward or extremely complex, based on the expense category. The more complex they are, the greater the human rights-related risks and the difficulties in managing them. According to the procurement risk map which BNP Paribas has introduced, less than a quarter of the Group's procurement categories are high-risk under modern slavery and child labour criteria.

Risks linked to BNP Paribas' financing and investment activities

BNP Paribas serves millions of individual customers and professionals, entrepreneurs, small and medium-sized enterprises and large corporate clients in industries with multiple environmental, social and governance (ESG) issues, and operates in countries where legal and governance systems are at diverse levels of development. This diverse backdrop requires highly structured and comprehensive scrutiny and assessment processes which use the expert knowledge of the Group's teams, in order to identify potential modern slavery and human trafficking risks in BNP Paribas' customer activities.

BNP PARIBAS' POLICY ON MODERN SLAVERY AND HUMAN TRAFFICKING

Human rights is one of the pillars on which BNP Paribas' CSR strategy is based. The Group is committed to promoting respect for a number of principles and norms which underpin the way it does business:

- the United Nations Sustainable Development Goals;
- the 10 Principles of the United Nations Global Compact;
- the United Nations Guiding Principles on Business and Human Rights;

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(1) This Statement applies to all companies within the BNP Paribas Group that are required to have a slavery and modern trafficking statement, except where they have chosen to produce their own statement.

(2) "Trafficking in persons" is defined as "the recruitment, transportation, transfer, harbouring or receipt of persons, by means of a threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation". United Nations Convention against Transnational Organized Crime and the Protocols Thereto.

(3) "Slavery is the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised" United Nations Slavery Convention.

- the internationally-accepted OECD Guidelines for multinational enterprises;
- the internationally-accepted standards of human rights, as defined in the International Bill of Human Rights;
- the core labour standards set out by the International Labour Organisation.

These public commitments are supported by internal Group Policies, which contribute to tackling numerous subjects on social, environmental and governance issues, including human rights violations. These include:

- BNP Paribas Group Code of conduct;
- the BNP Paribas statement on human rights;
- the BNP Paribas Suppliers CSR Charter;
- the BNP Paribas Responsible Business Principles.

Early and effective identification of modern slavery practices through specific policies and processes is the first step towards preventing, mitigating and redressing these practices. BNP Paribas has therefore taken the following measures in order to exercise its duty of care in this area with the required degree of seriousness.

BNP Paribas employees

BNP Paribas commits to offer a working environment in which all employees are treated fairly. In particular, the Group focuses on respect, the need to apply the most stringent norms of professional behaviour and rejects all forms of discrimination. BNP Paribas implements a number of policies in this area, including an annual review of high-risk countries in terms of human rights, and monitoring of employees aged between 16 and 18 (in 2019 there were three: one in Brazil, one in the United States and one in the United Kingdom). The existing Group's permanent policies and procedures notably include the Diversity and Inclusion policy, and the remuneration principles which reaffirm the non-discrimination principle in the recruitment process and professional development of employees. The BNP Paribas' Code of conduct, whose rules must be understood and followed by all employees, confirms the Group's commitment against harassment, including sexual harassment.

On this basis, everyone within the Group has the responsibility to treat all colleagues with respect, ensure that interactions with colleagues are professional and effective at all times, and listen to and value input from colleagues, even if they express different views.

The agreement on fundamental rights and the implementation of a global social framework, signed on 18 September 2018, has implemented an ambitious system which contributes to improving quality of life and working conditions for employees, thereby helping to promote a more equal society and inclusive growth.

Awareness and training

BNP Paribas took part in the development of an awareness-raising e-learning module called "Business and Human Rights" and co-created with the other members of the French association Entreprises pour les Droits de l'Homme (Enterprises for Human Rights – EDH). It is mandatory for all employees who directly contribute to the promotion of human rights: Risk people, Procurement business lines, business relations officers in CIB and the CSR network. It is also freely accessible to all Group employees.

Raising concerns

The purpose of the Group's ethics warning system is to enable any BNP Paribas employee to report a proven breach – or a suspicion of such a breach – of the Code of conduct, of a policy or of a Group procedure or regulation, not only to their organisational superior, but also, alternatively, to the compliance team of the entity to which they belong, or of a higher level. Every employee has the right to report ethics violations without fear of punishment, dismissal or discrimination for the simple fact of having made use, in good faith, of this system.

Consequently, any suspicion by a BNP Paribas employee of serious or potentially serious violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment, may be reported under this ethical alert system.

BNP Paribas suppliers

Dedicated teams in Group Strategic Sourcing deal with supplier-related ESG risks.

BNP Paribas bases its ESG risk management system for its suppliers and subcontractors on the following elements:

- an ESG risk map covering 13 issues, including modern slavery and child labour, and identifying purchasing categories that carry a significant amount of environmental and social risk;
- a Sustainable Sourcing Charter which sets out the reciprocal commitments of the Group and its suppliers and subcontractors from an environmental and social standpoint;
- contractual clauses incorporating compliance with the conventions of the International Labour Organization were introduced in all countries in which suppliers operate, including the option of ending contracts if suppliers do not comply with the Group's ESG requirements;
- ESG questionnaire templates used for calls for tenders, which include specific questions on the environment, ethics and human rights.
- supplier risk monitoring rules which target certain ESG criteria used during selection, supplemented by monitoring and intelligence in different areas;
- training for the Sourcing business.

For BNP Paribas clients (financing and investment activities)

BNP Paribas has set up ESG risk management systems for its financing and investment activities (see also *Rigorous management of Environmental, Social and Governance (ESG) risks*, Commitment 3). These systems are based on:

- the development of financing and investment policies to regulate sectors with high ESG risks;
- respect for the Equator Principles for major industrial and infrastructure projects;
- the integration of ESG criteria into the "Know Your Customer" process (KYC);
- a progressive integration of ESG criteria into lending and rating policies;

- the development and use of tools to manage and monitor such risks, such as specific questionnaires for activities that have salient environmental and social risks;
- training on ESG risk management systems for Financing business lines and Control functions;
- an operational control plan.

MEASURING EFFECTIVENESS

BNP Paribas is aware of the challenges of measuring and managing modern slavery and human trafficking issues. It regularly reviews and makes improvements to its processes and policies in this area in order to continually improve their scope and effectiveness.

Policies implemented for BNP Paribas employees

One of the indicators which BNP Paribas records for this category of stakeholders is the proportion of Group employees directly involved in promoting human rights who have received specific human rights training. At the end of 2019, 88% of the employees assigned the training had completed the online awareness module about taking human rights into account in financing decisions, compared with 85% in 2018 and against an objective of 80%. Since 2016, more than 7,000 Group employees have completed this training, which is still being rolled out.

Policies implemented for BNP Paribas suppliers

One of the indicators which BNP Paribas records for this category of stakeholders is the number of ESG assessments of suppliers and sub-contractors, in particular those relating to risky procurement categories. 2,500 ESG assessments were completed in 2019 (compared with 2,300 in 2018) and nearly 1,200 Responsible Purchasing charters were signed by Group suppliers.

Policies implemented for BNP Paribas financing and investment activities

Creating and maintaining a high-quality of dialogue between the Group and the entities that it finances or in which it invests is crucial in monitoring and remedying certain issues, including human rights-related issues. Another indicator which BNP Paribas records is changes to exclusion and monitoring lists (consisting of companies with which the Group does not wish to do business, or companies subject to additional monitoring, potentially as a result of serious human rights breaches). At the end of 2019, these lists included 1,087 legal entities (943 excluded and 144 under monitoring), compared to 992 legal entities at the end of 2018.

CONCLUSION

BNP used this statement in order to prepare the annual statement required by the Modern Slavery Act 2015 (United Kingdom). The statement may be consulted on the "Publications" page of the Group's website (https://group.bnpparibas/en/publications).

Jean-Laurent BONNAFÉ
Chief Executive Officer and Director

Jean LEMIERRE
Chairman of the Board of directors

26 February 2020

7.7. Extra-financial performance statement

A DIVERSIFIED AND INTERGRATED MODEL, CREATING VALUE

In a changing world ...

ECONOMIC AND REGULATORY ISSUES

DIGITAL CHALLENGE

SOCIETAL CHALLENGE

... advantages

A European Group with global reach operating in 71 countries and regions

Committed employees 198,816 people[1] worldwide

A sound financial structure with EUR 111.8 bn in shareholders' equity

Broad diversification of risks by business line, geographical area and sector

Cooperation between business lines, at the heart of the Group's momentum

A culture of technological innovation serving our clients

... enable the diversified and intergrated model

DOMESTIC MARKETS (DM)

- 65,579 employees
- Revenues : EUR 15.8 bn

INTERNATIONAL FINANCIAL SERVICES (IFS)

- 78,629 employees
- Revenues : EUR 17.2 bn

CORPORATE & INSTITUTIONAL BANKING (CIB)

- 34,985 employees
- Revenues : EUR 12.1 bn

The 2017-2020 strategic plan

DIGITAL TRANSFORMATION

- EUR 2.7 bn allocated between 2017 and 2019

FINANCIAL PERFORMANCE

- ROTE target[2]: 10% in 2020

CORPORATE COMMITMENT

- EUR 15.9 bn in financing for renewable energies

Serving customers and the world in which the Group operates, BNP Paribas supports transitions in society by providing expertise and by contributing to financing the economy. The Group creates value thanks to a model based on the diversification of risks and cooperation between business lines. Based on three pillars, the strategic plan directs how the business lines work together in order to respond in ever more customised ways to customer requirements and support them in moving towards sustainable solutions.
The Group therefore contributes to a positive impact for stakeholders and society as a whole.

... to propose sustainable solutions

SUPPORT
ADVICE
FINANCING
INVESTMENTS
SAVINGS
PROTECTION

... and create value

for all stakeholders : customers, shareholders and investors, employees, partners and suppliers, local communities, regions and civic society...

BY PROMOTING USEFUL INNOVATION FOR CUSTOMERS

(individuals, entrepreneurs, SME and mid-sized companies, large companies, institutional organisations, associations)

- **13.6 million** digital customers in the Group's Retail Banking networks[3]
- **97 million** monthly connections to mobile applications by customers of DM networks or digital banks
- **150 projects** using artificial intelligence are already operational or in development
- **Over 21 million** electronic orders processed for customers at Global Markets (CIB)

BY PROMOTING SUSTAINABLE GROWTH FOR THE ECONOMY

- **EUR 806 bn** in customer loans (+5,2% over 2018)
- **EUR 1,123 bn** in assets under management by the Asset Management, Cardif and Real Estate teams
- **EUR 8.2 bn** in net income Group share
- **EUR 3.10**[4] in dividend per share, with a yield of 6.5%[5]
- **EUR 10.6 bn** in purchasing at Group level
- **EUR 6.2 bn** in signed Sustainability Linked Loans[6]

AND A GROWING CONTRIBUTION TO SOCIETY

- **EUR 5.9 bn** in taxes paid by the Group worldwide
- **EUR 1.9 bn** in investments and financing granted to social companies
- **310** collective agreements signed across the Group
- Over **450,000** hours dedicated to solidarity initiatives by employees

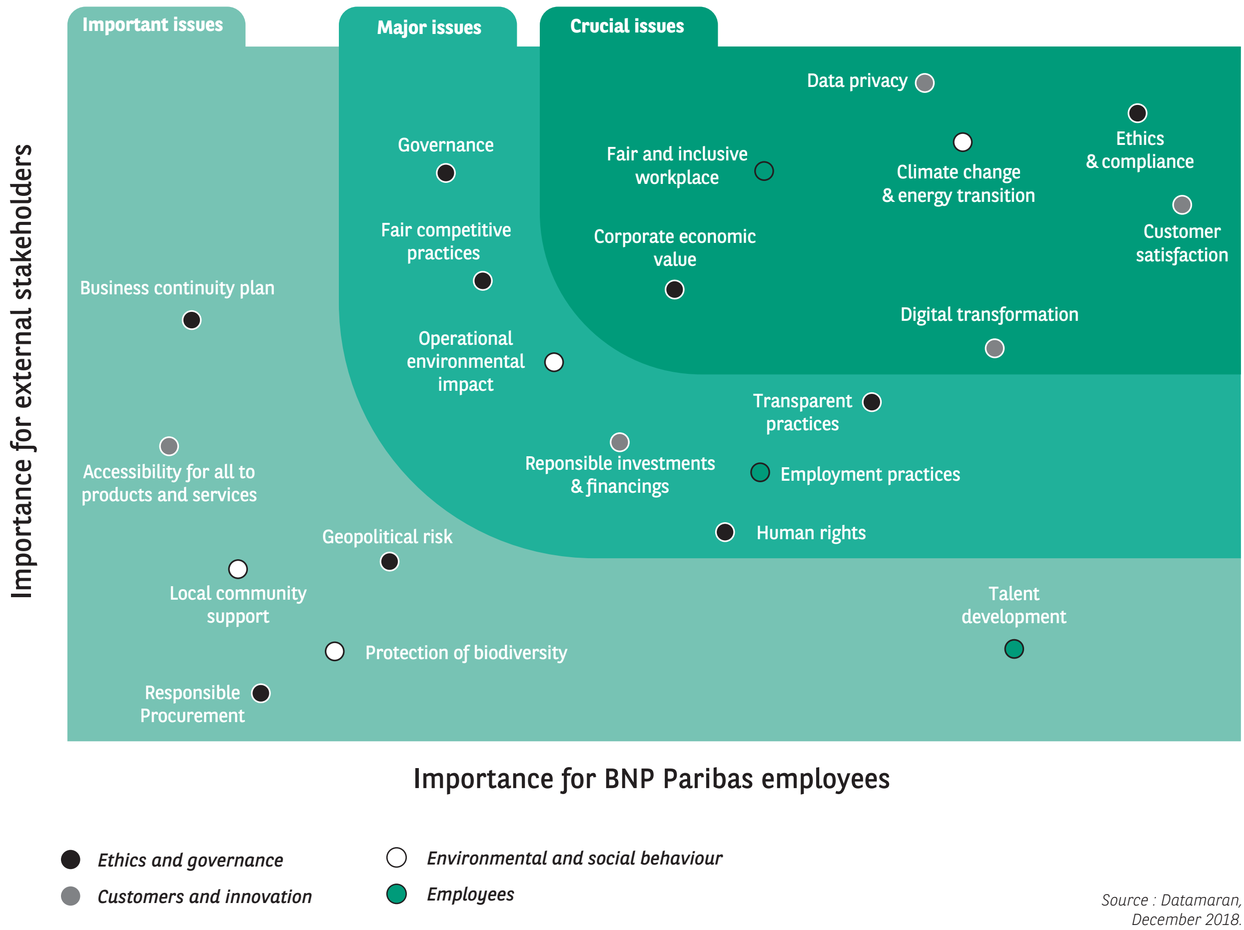
(1) Full-Time Equivalents (FTE).
(2) Return on Tangible Equity.
(3) Active clients having made at least one connection a month across the scope: individual, professional and Wealth Management customers of DM retail banking networks, international retail banking network customers (Europe-Mediterranean and BancWest) and customers of digital banks (including Germany, Austria and Nickel).
(4) Subject to approval at the Annual General Meeting of 19 May 2020.
(5) Based on the price at 31 January 2020 (€48.05).
(6) Positive impact loans.
Figures as at 31/12/2019

ANALYSIS OF STAKES, RISKS AND OPPORTUNITIES

Information requested pursuant to article R.225-105-1 of the French Commercial Code and Ordinance No. 2017-1180 respecting the publication of non-financial information.

BNP Paribas' business model is included in the preceding pages.

In order to complete this materiality matrix, BNP Paribas relied on an assessment of materiality criteria to classify a hundred of extra-financial issues based on their relevance to BNP Paribas stakeholders and their impact on the Group's performance. Various sources were used: a comparative study of the publications of 59 banks, 2,070 regulations, nearly 15,000 articles from the sectoral press, 128 million tweets, and finally 28% of top management employees attested to the importance of these issues for BNP Paribas. The results of this study are presented below and are classified into three types of issues: important, major and crucial.



Source : Datamaran, December 2018.

Following this materiality analysis, the most major and crucial issues were selected. The risks linked to each of these 14 issues are shown in the table below. These issues are listed according to the four categories of information appearing in Ordinance 2017-1180: social and environmental consequences, respect for human rights, fight against corruption and tax evasion, to which economic and governance issues were added. The indicators, policies and associated due diligence are then further developed in the relevant chapters.

Area	Issue	Risks/Opportunities	Paragraph	Policy	Indicator	Pages (Paragraphs; Indicator)
Social	Fair and inclusive workplace	Discrimination risks	Promotion of diversity and inclusion in the workplace	Global agreement	Proportion of women holding an SMP position ≥ 31% in 2021	536; 515
	Employment practices	Loss of talent risk	A "Good place to work" and responsible employment management A learning company supporting dynamic professional path management	Global agreement, Code of conduct	Proportion of employees who followed at least two training courses (in all forms, including e-learning) during the previous 12 months > 90% in 2021	535; 515
Civic	Fair competition practices	Legal risk	Compliance and reputation risk Legal risk	Code of conduct	Proportion of total employees (non-exempt) who have taken part in the "Competition law and you" training course	432-434; 525
	Transparent practices	Risks of discrimination for some customers and lack of sales information	Protecting clients' interests	Code of conduct, Group policy on protecting clients' interests	Proportion of eligible employees who have taken part in the "MiFID II Awareness" training course	526; 526
	Data privacy	Reputational and operational risks: leaking, alteration or loss of data	Cyber security and technology risk Protecting clients' interests	Code of conduct	Proportion of total employees who have taken part in the "Know Your Data" training course	434-435; 525
Civic/ Environment	Responsible investment and financing	Reputational risks and opportunity to limit social and environmental risks	Investments and financing with a positive impact	Engagement manifesto	Share of loans to companies supporting the energy transition and sectors directly contributing to the SDGs	520-524; 515
Environment	Climate change and energy transition	Transition, physical, pollution, biodiversity, reputational, legal liability risks	Systematic integration and management of Environmental, Social and Governance risks (ESG) Enabling our clients to transition to a low-carbon economy respectful of the environment	Engagement manifesto, BNP Paribas Environmental Commitments	Financing for renewable energies	528-529; 515
	Operational environmental impacts	Opportunity to limit environmental risks	Reduce the environmental impacts of our operations	Engagement manifesto, BNP Paribas Environmental Commitments	Greenhouse gas emissions	564-566; 565

Area	Issue	Risks/Opportunities	Paragraph	Policy	Indicator	Pages (Paragraphs; Indicator)
Economic	Customer satisfaction	Operational risk	Monitoring customer satisfaction	Group policy on protecting clients' interests	Average Retail Banking customer satisfaction score for the four Domestic Markets (France, Luxembourg, Belgium and Italy)	527; 527
	Digital transformation	Cyber security and technology risk	Cyber security and technology risk Strong growth in income thanks to business drive and transformation	Plan 2020	Number of digital customers in domestic markets and international networks	114-128; 273; 116; 121
	Corporate economic value	Operational risk	Strong growth in income thanks to business drive and transformation	Plan 2020	Return on tangible equity	114-115; 148
Human rights	Human rights	Risks of violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment	Duty of care and Modern Slavery Act -and human trafficking statement	BNP Pa ibas statement on Human Rights, Responsible Business Principles	Percentage of employees who have received human rights training	569; 555
Fight against corruption and tax evasion	Ethics and compliance	Financial risks	Ethics of the highest standard	Code of conduct	Proportion of employees who have received training on ethics and conduct	525; 515
Governance	Governance	Operational, legal and reputational risks	Membership of the Board Directors' independence	Report on corporate governance	Number of independent Board members	47; 47

7.8 Table of concordance with GRI, ISO 26000, Global Compact, Sustainable Development Goals, Principles for Responsible Banking and TCFD

2019 Universal Registration Document	Pages	Global Reporting Initiative V4(*)	ISO 26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	TCFD(**)
Our strategy, BNP Paribas purpose and consideration of environment and social issues	513	G4-102-14, G4-103	5.2.2, 5.2.3, 6.2	1-10	1-17	1-6	1a, 1b
Our corporate social responsibility strategy							
A bank committed to a better future	514	G4-102	5.2.1, 5.2.2, 6.6.3, 6.6.4, 6.6.6	1-10	1-17	1 - 6	
The CSR management indicators	515	G4-102	4.3, 7.7.2, 7.7.3	1, 6, 7, 8	1-17	5, 6	4a, 4b, 4c
BNP Paribas' public positions	515	G4-102	6.8.9, 7.3.3	1, 3, 6, 8,10	1-17	3, 4, 6	
Progress acknowledged by extra-financial rating agencies	517	G4-102	7.6.2				
CSR taken to the highest level in the organisation	518	G4-102	6.2.2			5	1a, 1b
Fostering dialogue with stakeholders	518	G4-102	5.3.3, 7.5.4	1, 3, 9	17	4	
OUR ECONOMIC RESPONSIBILITY: FINANCING THE ECONOMY IN AN ETHICAL MANNER							
Commitment 1 – Investments and financing with a positive impact							
Supporting SMEs and contributing to more inclusive growth	520	FS7, FS14, G4-202, G4-203	6.3.7, 6.8.7, 6.8.8.	4	5, 8, 9, 10	2, 3	
Contributing to the United Nations Sustainable Development Goals (SDGs)	521	G4-DMA, FS14, FS16, G4-203	6.8.2	1-10	17	1	2a, 2b
Financing Social Entrepreneurship	522	FS14, G4-203	6.8.7, 6.7.9	1, 4	8, 10, 11	2, 4	
Development of Social Impact Bonds, and the creation of the BNP Paribas European Social Impact Bonds fund with the European Investment Fund	523	FS7, G4-203	6.8.7, 7.3.1	1, 4, 6	8, 10, 11, 17	2, 4	
Designing and promoting Socially Responsible Investment funds (SRI)	523	G4-DMA, FS11, G4-203	6.7.3, 6.7.9	1, 9	6, 7, 10, 11, 13, 14, 15, 17	1 - 3	2a, 2b
Tailored advice and support	524	FS14	6.3.7, 6.7.3, 6.7.9	6	5, 8, 9	3, 4	

2019 Universal Registration Document	Pages	Global Reporting Initiative V4(*)	ISO 26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	TCFD(**)
Commitment 2 – Ethics of the highest standard							
Ethics of the highest standard	525	G4-205, G4-206, G4-103	4.7, 6.6.3, 6.6.4, 6.6.6, 6.6.7	10	10, 16	2, 5, 6	
Protecting clients' interests	526	G4-DMA, G4-418	6.6.7, 6.7.3, 6.7.4, 6.7.6, 6.7.7	10	10	3, 5	
Ethics at the heart of supplier relations	528	G4-204, G4-308, G4-414	5.2.1, 6.6.3, 6.7.3	10	12, 16	4, 5	
Commitment 3 – Systematic integration and management of Environmental, Social and Governance risks (ESG)							
Finance and investment policies governing the Group's activity sectors with significant ESG issues	528	G4-DMA, G4-411, G4-412, G4-413	4.4, 4.6, 6.2, 6.3.4, 6.3.5, 6.6.3, 6.8.7	1-10	3, 5, 6, 8, 13, 14, 15, 16	1-3	3a, 3b, 3c
Measures to combat deforestation and protect biodiversity.	531	G4-304	6.5.4, 6.5.5, 6.5.6	7 - 9	6, 12, 14, 15	2, 3, 4, 6	3a, 3b, 3c
Upholding the Equator Principles on project financing	531	G4-DMA, G4-411, G4-412, G4-413	6.6.7	1-10	3, 5, 6, 8, 9, 13, 14, 15, 16	1-6	3a, 3b, 3c
Managing physical risk	532	G4-201	6.5.2, 6.5.5	7, 8	10, 11, 13	1, 2, 5, 6	3a, 3b, 3c
A comprehensive system of ESG risk assessment of the products and services provided by the Group	532	G4-DMA, G4-201, G4-203	6.3.5, 6.7.4, 6.7.5	1-10	16	1, 2, 3, 5, 6	3b, 3c
Management and monitoring tools for ESG risks	534	G4-DMA, G4-201, FS11	6.3.5, 6.4.7, 6.7.4, 6.7.5	1-10	16	1, 2, 3, 5, 6	3c
OUR SOCIAL RESPONSIBILITY: DEVELOPING AND ENGAGING OUR PEOPLE RESPONSIBLY							
Promoting diversity and inclusion in the workplace: employees are seeing concrete results	535		6.4.7		5, 8	1	
The HR 2020 transformation is keeping its promises	535	G4-103	6.4.7		4, 5, 8	1	
Commitment 4 – Promotion of diversity and inclusion in the workplace							
A solid framework, a multi-actor commitment	536	G4-103, G4-405, G4-406	6.3.7, 6.4.3, 6.4.7,	1, 6	5, 8, 10	5	
Communicating, raising awareness, training: maintaining a culture of inclusion	536	G4-405, G4-406	5.5.5, 6.6.6	1, 6	5, 8, 10, 16	4, 5	
Outstanding initiatives	536	G4-405, G4-406	6.3.7, 6.3.10, 6.4.3, 6.6.6	1, 6	5, 8, 10, 16	5, 6	
Strong results	539	G4-405, G4-406	5.3.3	1, 6	5, 8, 10, 17	5, 6	

2019 Universal Registration Document	Pages	Global Reporting Initiative V4(*)	ISO 26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	TCFD(**)
Commitment 5 – A "Good place to work" and responsible employment management							
Workforce evolution, Recruitment, changes in headcount, organisation of working hours	540	G4-401, G4-402	6.4.3, 6.4.4		5, 8	6	
Quality social dialogue	543	G4-407	5.3.3, 6.4.3, 6.3.10, 6.4.5	3	3, 5, 8, 17	1, 4, 5	
Listening to employees through the Global People Survey	544		5.3.3		5, 8	4, 5	
A competitive compensation policy	545	G4-401	6.4.3, 6.4.4		5, 8	4, 6	
Focus on people (working conditions, health and safety, risk prevention)	546	G4-403	6.4.3, 6.4.4, 6.4.6	6	3, 5, 8	1, 5, 6	
Commitment 6 – A learning company supporting dynamic professional path management							
Managing professional paths	548	G4-404	6.4.7	6	4, 5, 8, 10	1, 4	
Training policy	549	G4-404	6.4.7, 6.8.5	1, 8	4, 5, 8, 17	1, 4	
Mobility	551		6.4.3, 6.4.7		4, 5, 8, 10	1, 4, 5	
OUR CIVIC RESPONSIBILITY: BEING A POSITIVE AGENT FOR CHANGE							
Commitment 7 – Products and services that are widely accessible							
Group support to microfinance	552	FS14	6.8.9	6, 8, 9	1, 8, 10, 17	1-3	
Providing assistance to fragile customers	553	FS14	6.7.4, 6.7.8, 6.8.6	6	8, 10	1-3	
Commitment 8 – Combat social exclusion and support human rights							
Combat social exclusion	554	G4-413	6.8.3, 6.8.4, 6.8.5	6	8, 10, 11	1, 2	
BNP Paribas is committed to respecting human rights	555	G4-407, G4-408, G4-409, G4-411, G4-412	6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.7.7	1 - 6	1, 2, 8, 16	1, 2, 4, 5, 6	
Commitment 9 – Corporate philanthropy policy focused on the arts, solidarity and the environment							
Solidarity	557	G4-413	6.4.7, 6.8.3	6	3, 4, 6, 7, 8, 13, 14, 15	1, 2, 4	
Arts	557		6.8.4		11		
OUR ENVIRONMENTAL RESPONSIBILITY: ACCELERATING THE ENERGY AND ENVIRONMENTAL TRANSITION							
Commitment 10 – Enabling our clients to transition to a low-carbon economy respectful of the environment.							
Helping to finance the energy and environmental transition	559	G4-302,	6.5.3, 6.5.4, 6.5.5, 6.6.6, 6.7.5	7-9	7, 9, 11, 13	1-6	3b, 3c
Using third-party asset management supporting the energy and environmental transition	560	FS11, G4-302	6.5.4, 6.5.5, 6.6.6, 6.7.5	7-9	6, 7, 8, 9, 11, 13, 14, 15	1, 2, 3, 4, 5	3b, 3c
Fully supporting corporate clients in the energy and environmental transition	560	G4-302	6.5.3, 6.5.4, 6.5.5, 6.6.6, 6.7.5	7 - 9	7, 9, 11, 13	1, 3, 4	3b, 3c

2019 Universal Registration Document	Pages	Global Reporting Initiative V4(*)	ISO26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	TCFD(**)
Helping personal banking customers lower their energy consumption	561	G4-302	6.5.3, 6.5.4, 6.5.5, 6.6.6, 6.7.5	7-9	7, 11, 13	1, 3, 4	3b, 3c
Supporting the role of women in the fight against climate change	562	G4-413, G4-201	6.6.6, 6.7.7, 6.8.7	4, 7, 8, 9	5, 8	1-5	3b, 3c
Actively contributing to the transition to the circular economy	562	G4-301, G4-302, G4-305	6.5.3, 6.5.4, 6.7.5, 6.8.6	7-9	12	1-5	3b, 3c
Helping to protect biodiversity and the oceans	563	G4-304	6.5.6	7-9	5, 12, 14, 15	1, 2, 5	3c
Blended finance: innovative finance to promote the energy and agroecology transition	563	G4-304	6.5.5	5-9	9, 11, 12	1, 2, 4, 5	3c
Commitment 11 – Reduce the environmental impacts of our operations							
Green company for employees (GC4E): a global employee commitment	564	G4-DMA, G4-305	6.5.3, 6.5.4, 6.5.5, 6.7.5	7, 9	12, 13	1, 5, 6	4a, 4b
Ongoing efforts to save energy and improve energy efficiency in our operations	564	G4-DMA, G4-301, G4-302, G4-305	6.5.3, 6.5.4, 6.5.5, 6.7.5	7, 9	9, 11, 12, 13	1, 5, 6	4a, 4b
Use of low-carbon electricity	565	G4-302, G4-305	6.5.3, 6.5.4, 6.5.5, 6.7.5	7, 9	11, 12, 13	1, 5, 6	4a, 4b
Offsetting residual emissions	565	G4-305	6.5.4, 6.5.5	8	9, 11, 12, 13	1, 5, 6	4a, 4b
Biodiversity actions	566	G4-DMA, G4-303, G4-304	6.5.4, 6.5.5, 6.5.6	7, 9	6, 12, 15	1, 5, 6	
Waste and recycling	566	G4-DMA, G4-306	6.5.3, 6.5.4, 6.5.5	7, 9	11, 12	1, 5, 6	
Commitment 12 – Advance awareness and sharing of best environmental practices							
Supporting research and development on climate change and biodiversity	566		6.5.5, 6.6.6, 6.8.6, 6.8.9	8, 9	13, 14, 17	4, 5	3a, 3c
Raising awareness among internal and external stakeholders	567	G4-404	6.5.5, 6.6.6, 6.8.6, 6.8.9	9	17	4, 5	3a
Taking an active part in partnerships and collective initiatives	568		6.5.5, 6.6.6, 6.8.6, 6.8.9	9	17	4, 5	3a

2019 Universal Registration Document	Pages	Global Reporting Initiative V4(*)	ISO 26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	TCFD(**)
DUTY OF CARE AND MODERN SLAVERY AND HUMAN TRAFFICKING STATEMENT							
Duty of care: 2019 BNP Paribas' vigilance plan	569	G4-DMA, G4-102, G4-103, G4-205, G4-412, G4-416, G4-418	5.2.2, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.8, 6.3.9, 6.3.10, 6.4.3, 6.4.4, 6.4.5, 6.4.6, 6.5.3, 6.5.5, 6.5.6, 6.6.7, 6.7.7	1-7	3, 5, 6, 8, 13, 15, 16	1-6	1a, 1b, 2a, 2b, 3a, 3b, 3c
Modern slavery and human trafficking statement	573	G4-DMA, G4-102, G4-103, G4-408, G4-409, G4-412	5.2.2, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.10	1, 2, 4, 5	5, 8, 16	1-6	
Extra-financial performance statement	576	G4-DMA, G4-102, G4-103, G4-205, G4-412, G4-416, G4-418	5.2.2, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.8, 6.3.9, 6.3.10, 6.4.3, 6.4.4, 6.4.5, 6.4.6, 6.5.3, 6.5.5, 6.5.6, 6.6.7, 6.7.7,	1-7	3, 5, 6, 8, 13, 15, 16	1-6	1a, 1b, 2a, 2b, 3a, 3b, 3c 4a, 4b, 4c
APPENDICES							
Grenelle II table of concordance	581						
Statutory Auditors' opinion	586	GRI-102-56					

(*) Managerial approach defined in the GRI G4 guidelines (financial sector); EC: Economy; EN: Environment; PR: Product responsibility; LA: Social labour practices and decent work; HR: Human rights; SO: Society; FS: Impact of products and services

(**) Task force on Climate Related Financial Disclosures.

7.9 Report by one of the Statutory Auditors, appointed as an independent third party, on the non-financial information statement included in the management report

For the year ended December 31st 2019

This is a free translation into English of the Statutory Auditor's report issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the BNP Paribas annual general meeting,

In our capacity as Statutory Auditor of BNP Paribas (hereinafter the "entity"), appointed as an independent third party and accredited by COFRAC under number 3-1060 rév.2 (whose scope is available at www.cofrac.fr), we hereby report to you on the non-financial information statement for the year ended 31 December 2019 (hereinafter the "Statement"), included in the management report pursuant to the legal and regulatory provisions of articles L. 225102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code (*Code de commerce*).

THE ENTITY'S RESPONSIBILITY

Pursuant to legal and regulatory requirements, the Board of Directors is responsible for preparing the Statement, including a presentation of the business model, a description of the principal nonfinancial risks, a presentation of the policies implemented considering those risks and the outcomes of said policies, including key performance indicators.

The Statement has been prepared in accordance with the entity's procedures (hereinafter the "Guidelines"), the main elements of which are presented in the Statement which are available on request from the entity's head office.

INDEPENDENCE AND QUALITY CONTROL

Our independence is defined by the provisions of article L. 822-11-3 of the French Commercial Code and the French Code of Ethics (*Code de déontologie*) of our profession. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements, French professional guidance and applicable legal and regulatory requirements.

RESPONSIBILITY OF THE STATUTORY AUDITOR, APPOINTED AS AN INDEPENDENT THIRD PARTY

On the basis of our work, our responsibility is to provide a report expressing a limited assurance conclusion on:

- the compliance of the Statement with the provisions of article R. 225-105 of the French Commercial Code;
- the fairness of the information provided in accordance with article R. 225105 I, 3 and II of the French Commercial Code, i.e., the outcomes, including key performance indicators, and the measures implemented considering the principal risks (hereinafter the "Information").

However, it is not our responsibility to comment on:

- the entity's compliance with other applicable legal and regulatory provisions, in particular the French duty of care law and anti-corruption and tax evasion legislation;
- the compliance of products and services with the applicable regulations.

Nature and scope of our work

The work described below was performed in accordance with the provisions of articles A. 225-1 et seq. of the French Commercial Code determining the conditions in which the independent third party performs its engagement and with the professional guidance of the French Institute of Statutory Auditors ("CNCC") applicable to such engagements, as well as with ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information.

Our procedures allowed us to assess the compliance of the Statement with regulatory provisions and the fairness of the Information:

- we obtained an understanding of the entity's activities, the description of the social and environmental risks associated with its activities and, where applicable, the impact of these activities on compliance with human rights and anticorruption and tax evasion legislation, as well as the resulting policies and their outcomes;
- we assessed the suitability of the Guidelines with respect to their relevance, completeness, reliability, objectivity and understandability, with due consideration of industry best practices, where appropriate;
- we verified that the Statement includes each category of social and environmental information set out in article L. 2251021 III, as well as information regarding compliance with human rights and anticorruption and tax evasion legislation;
- we verified that the Statement includes an explanation for the absence of the information required under article L. 225-102-1 III, 2;
- we verified that the Statement presents the business model and the principal risks associated with all the consolidated entities' activities, including where relevant and proportionate, the risks associated with their business relationships and products or services, as well as their policies, measures and the outcomes thereof, including key performance indicators;
- we verified, where relevant with respect to the principal risks or the policies presented, that the Statement provides the information required under article R. 225-105 II;
- we assessed the process used to identify and confirm the principal risks;
- we asked what internal control and risk management procedures the entity has put in place;
- we assessed the consistency of the outcomes and the key performance indicators used with respect to the principal risks and the policies presented;
- we verified that the Statement includes a clear and reasoned explanation for the absence of policies concerning one or more of the risks;
- we verified that the Statement covers the scope of consolidation, all the companies included in the scope of consolidation in accordance with article L. 233-16 within the limitations set out in the Statement;
- we assessed the data collection process implemented by the entity to ensure the completeness and fairness of the Information;
- for the key performance indicators and other quantitative outcomes that we considered to be the most important, we implemented:
  - analytical procedures to verify the proper consolidation of the data collected and the consistency of any changes in those data,
  - substantive tests, using sampling techniques, in order to verify the proper application of the definitions and procedures and reconcile the data with the supporting documents. This work was carried out on a selection of contributing entities, namely BNP Paribas SA (France), including the DRSE, HR Group, IMEX and GSS, BNP Paribas Bank Polska S.A. (Poland), CIB, BP2S, WM, IP, PF Brazil, Cardif Brazil (Brazil) and BNP Paribas RE (France), and covers between 23% and 100% of the consolidated data relating to the key performance indicators and outcomes selected for these tests;
- we referred to documentary sources and conducted interviews to corroborate the qualitative information (measures and outcomes) that we considered to be the most important;
- we assessed the overall consistency of the Statement based on our knowledge of all the consolidated entities.

We believe that the work carried out, based on our professional judgement, is sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures.

Means and resources

Our work was carried out by a team of 7 people between October 2019 and March 2020 and took a total of 12 weeks.

We were assisted in our work by our specialists in sustainable development and corporate social responsibility. We conducted approximatively ten interviews with people responsible for preparing the Statement, representing the CSR Delegation and the Direction of Human Resources.

Conclusion

Based on our work, with the except of the items described above, nothing has come to our attention that causes us to believe that the non-financial information statement is not in accordance with the applicable regulatory provisions and that the Information, taken as a whole, is not presented fairly and in accordance with the Guidelines.

Neuilly-sur-Seine, March 3rd 2020

One of the Statutory Auditors

PricewaterhouseCoopers Audit

Patrice Morot	Sylvain Lambert
Partner	Sustainable Development Partner

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APPENDIX: LIST OF THE INFORMATION WE CONSIDERED MOST IMPORTANT

Key performance indicators and other quantitative results:

- Headcounts as of December 31st, 2019, and movements throughout the year;
- Absenteeism rate;
- Proportion of women among members of cross-countries and/or cross-businesses executive committees;
- Staff rate of employees eligible to a minimum of 14 weeks maternity leave;
- Staff rate of employees eligible to a minimum of 6 days paternity leave;
- Staff rate of employee who followed at least 2 training (e-learning included) during the last 12 months;
- Number of disabled employees within the company;
- Staff rate of employee who completed the training "The competition law and you";
- Staff rate of employee who followed the training "MiFID II Awareness";
- Staff rate of employee who followed the training "Know Your Data";
- Share of loans to companies contributing to the achievement of the SDGs;
- Amount of investments dedicated to renewable energies;
- Energy consumptions and professional travels (within the Group);
- GHG emission assessment (scope I, II and III);
- Average satisfaction score of retail banking clients in the 4 domestic markets (France, Italy, Luxemburg and Belgium);
- Number of digital clients of domestic markets and international networks;
- Return on tangible equity;
- Staff rate of employee directly contributing to the promotion of human rights who have undergone dedicated training;
- Staff rate of employee who completed ethics or conduct trainings;
- Number of independent board members;
- Hours of skill-based volunteering and solidarity actions for the civil society.

Qualitative information (actions and results):

- Personal development programs: "Active Inclusion", "Leaders for tomorrow" et "Leadership for change";
- "Digital Data & Agile Academy" proposing upskilling and reskilling programs for all collaborators since 2019;
- Launch of "About Me", internal tool for developing a personal development plan, enriching the skills profile of employees and responding to personalized internal offers;
- Implementation within the Group of the commitments stated in the ILO Global Business and Disability Charter;
- Diversity week: awareness-raising actions on diversity issues;
- Awareness actions and trainings on disability issues (training "Integrate and manage a disabled staff", partnership with a worldwide NGO working on disability issues);
- Trainings on business ethics;
- Participation in the development, signature and promotion of the commitment charter "Accelerating inclusion: women leaders in the climate action" (Accélérer l'inclusion: les femmes leaders de l'action climatique);
- ClimateSeed (voluntary carbon compensation platform) by BNP Paribas Securities Services;
- Compensation project for residual greenhouse gases emitted by the Group in 2018;
- Climate indexes launched by BNP Paribas that raised more than 2 billion euros (including 750 million euros in 2019);
- Funding and investment policies on agriculture, palm oil, defense, nuclear energy, pulp paper, coal-based energy, mining, and non-conventional oils;
- BNP Paribas Asset Management (AM) "Global Sustainability Strategy", launched in 2019, presenting the integration of SDGs into its strategy and investment decisions through ESG integration, engagement and dialogue ("stewardship"), exclusion and long-term perspective;
- "Green Company for Employees" program;
- *Numobi* offer: new integrated offer of electric car leasing (Arval);
- 2019 update of the Group policy on the protection of clients' interests (Politique PIC – Protection des Intérêts des Clients), which lays down rules of organization and conduct to be observed in order to identify and reduce the risks of non-compliance with obligations to protect the interests of customers;
- Deployment of the Net Promoter System within Retail Banking & Services entities by the "Client & Employee Advocacy" program team.

8 GENERAL INFORMATION

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8.1 Documents on display

This document is available on the BNP Paribas website, www.invest.bnpparibas.com, and the Autorité des Marchés Financiers (AMF) website, www.amf-france.org.

Any person wishing to receive additional information about the BNP Paribas Group can request documents, without commitment, as follows:

- by writing to:

  BNP Paribas – Group Finance

  Investor Relations and Financial Information

  3, rue d'Antin – CAA01B1

  75002 Paris
- by calling: +33 (0)1 40 14 63 58

BNP Paribas' regulatory information (in French) can be viewed at: https://invest.bnpparibas.com/information-reglementee.

8.2 Material contracts

To date, BNP Paribas has not entered into any material contracts – other than those entered into during the normal course of business – that create an obligation or commitment for the entire Group.

8.3 Dependence on external parties

In April 2004, BNP Paribas SA began outsourcing IT Infrastructure Management Services to the BNP Paribas Partners for Innovation (BP²I) joint venture set up with IBM France at the end of 2003. BP²I provides IT Infrastructure Management Services for BNP Paribas SA and several BNP Paribas subsidiaries in France (including BNP Paribas Personal Finance, BP2S, and BNP Paribas Cardif), Switzerland, and Italy. The contractual arrangement with IBM France was successively extended from year to year until the end of 2021, and then extended for a period of 5 years, *i.e.* by the end of 2026, in particular to integrate the IBM cloud services.

BP²I is under the operational control of IBM France. BNP Paribas has a strong influence over this entity, which is 50/50 owned with IBM France.

The BNP Paribas staff made available to BP²I make up half of that entity's permanent staff, its buildings and processing centres are the property of the Group, and the governance in place provides BNP Paribas with the contractual right to monitor the entity and bring it back into the Group if necessary.

IBM Luxembourg is responsible for infrastructure and data production services for some of BNP Paribas Luxembourg entities.

BancWest's data processing operations are outsourced to Fidelity Information Services. Cofinoga France's data processing operation is outsourced to IBM Services.

8.4 Significant changes

There have been no significant changes in the Group's financial or business situation since the end of the last financial year for which audited financial statements were published, and in particular since the signature of the Statutory Auditors' report on the consolidated financial statements on 3 March 2020.

8.5 Investments

The following table lists the Group's investments since 1 January 2017 that are individually valued at over EUR 500 million and are considered material at a Group level:

Country	Announcement date	Transaction	Transaction amount	Comments
Poland	31 October 2018	Acquisition by BGZ BNP Paribas of the core banking operations of Raiffeisen Bank Polska	EUR 756 million	The transaction price is the equivalent in euro of the price paid (PLN 3.25 billion) on the basis of a €/PLN exchange rate of ~4.30 as at 30/10/18
UK	21 October 2019	Strategic partnership giving rise to contributions from BNP Paribas Securities and BNP Paribas Asset Management assets/ activities in exchange for a 22.5% stake in LHC4, holding company of Allfunds	Non disclosed	Subject to regulatory approval and authorisations

8.6 Information on locations and businesses in 2019

In accordance with article L.511-45 of the French Monetary and Financial Code and Decree No. 2014-1657 of 29 December 2014, credit institutions, financial holding companies, mixed financial holding companies and investment firms are obliged to disclose information about their locations and activities, included in their scope of consolidation, in each State or territory..

I. LOCATIONS BY COUNTRY

Locations	Business
European Union member States	
Austria	
All In One Vermietung GmbH	Leasing Solutions
Arval Austria GmbH	Arval
BNPP Asset Management France (Austria branch)	Asset Management
BNPP Lease Group GmbH & Co KG	Leasing Solutions
BNPP Personal Finance (Austria branch)	Personal Finance
BNPP SA (Austria branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Austria branch)	Insurance
Cardif Assurances Risques Divers (Austria branch)	Insurance
CNH Industrial Capital Europe GmbH	Leasing Solutions
Opel Leasing GmbH (Austria branch)	Personal Finance
Belgium	
AG Insurance	Insurance
Alpha Crédit SA	Personal Finance
Arval Belgium NV SA	Arval
Astridplaza	Insurance
Bancontact Paytoniq Company	Retail Banking
Banking Funding Company SA	Retail Banking
BASS Master Issuer NV	Retail Banking
Belgian Mobile ID	Retail Banking
BNPP 3 Step IT (Belgium branch)	Leasing Solutions
BNPP Asset Management Be Holding	Asset Management
BNPP Asset Management Belgium	Asset Management
BNPP B Control	Asset Management
BNPP B Institutional II	Asset Management
BNPP Fortis	Retail Banking
BNPP Fortis Factor NV	Retail Banking
BNPP Fortis Film Finance	Retail Banking
BNPP FPE Belgium	Retail Banking
BNPP FPE Expansion	Retail Banking
BNPP FPE Management	Retail Banking
BNPP Lease Group Belgium	Leasing Solutions
BNPP Real Estate Advisory Belgium SA	Real Estate Services
BNPP Real Estate Holding Benelux SA	Real Estate Services
BNPP Real Estate Investment Management Belgium	Real Estate Services
BNPP Real Estate Property Management Belgium	Real Estate Services
BNPP SA (Belgium branch)	Corporate and Institutional Banking
BNPP Securities Services (Belgium branch)	Securities Services
Bpost Banque	Retail Banking
Cardif Assurance Vie (Belgium branch)	Insurance
Cardif Assurances Risques Divers (Belgium branch)	Insurance
CNH Industrial Capital Europe (Belgium branch)	Leasing Solutions
Credissimo	Retail Banking
Credissimo Hainaut SA	Retail Banking
Crédit pour Habitations Sociales	Retail Banking
Eos Aremas Belgium SA NV	Personal Finance
Epimede	Retail Banking
ES-Finance	Leasing Solutions
Esmee Master Issuer	Retail Banking
FL Zeebrugge	Leasing Solutions
Fortis Lease Belgium	Leasing Solutions
FScholen	Corporate and Institutional Banking
Gambit Financial Solutions	Asset Management
Immo Beaulieu	Retail Banking
Immobilière Sauveniere SA	Retail Banking
Isabel SA NV	Retail Banking
Locadif	Arval
Microstart	Retail Banking
Opel Finance BV (Ex- Opel Finance BVBA)	Personal Finance
Private Equity Investments	Retail Banking
Sagip	Retail Banking
Sowo Invest SA NV	Retail Banking
Bulgaria	
BNPP Personal Finance (Bulgaria branch)	Personal Finance
BNPP SA (Bulgaria branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Bulgaria branch)	Insurance
Cardif Assurances Risques Divers (Bulgaria branch)	Insurance
Czech Republic	
Arval CZ SRO	Arval
BNPP Cardif Pojistovna AS	Insurance
BNPP Personal Finance (Czech Republic branch)	Personal Finance
BNPP Real Estate APM CR SRO	Real Estate Services
BNPP SA (Czech Republic branch)	Corporate and Institutional Banking
Denmark	
Arval AS	Arval
BNPP Factor AS	Retail Banking
BNPP SA (Denmark branch)	Corporate and Institutional Banking
Cardif Forsakring AB (Denmark branch)	Insurance
Cardif Livforsakring AB (Denmark branch)	Insurance
Ekspres Bank AS	Personal Finance
Finland	
Arval OY	Arval
BNPP SA (Finland branch)	Corporate and Institutional Banking
EAB Group PLC (Ex- Elite Asset Management PLC)	Asset Management
France	
AEW Immocommercial	Insurance
Agathe Retail France	Insurance
Ambrosia Avril 2025	Insurance
Ambrosia Mars 2026	Insurance
Antin Participation 5	Property Companies (Property used in operations) and Others
Aprolis Finance	Leasing Solutions
Artegy	Leasing Solutions
Artel	Arval
Arval Fleet Services	Arval
Arval Service Lease	Arval
Arval Trading	Arval
Atargatis	Corporate and Institutional Banking
Auguste Thouard Expertise	Real Estate Services
Austin Finance	Corporate and Institutional Banking
Autonoria 2019	Personal Finance
Autop Ocean Indien	Personal Finance
Axa Banque Financement	Personal Finance
Banque de Wallis et Futuna	Retail Banking
Banque Solfea	Personal Finance
BNP Paribas Indice France (Ex- BNPP Indice France)	Insurance
BNP Paribas SA	Banking
BNPP 3 Step IT (Ex- Arius)	Leasing Solutions
BNPP Actions Croissance (Ex- Camgestion Actions Croissance)	Insurance
BNPP Actions Entrepreneurs	Insurance
BNPP Actions Euro (Ex- Camgestion Actions Euro)	Insurance
BNPP Actions Monde	Insurance
BNPP Actions PME	Insurance
BNPP Antilles Guyane	Retail Banking
BNPP Aqua	Insurance
BNPP Arbitrage	Corporate and Institutional Banking
BNPP Asset Management France	Asset Management
BNPP Asset Management Holding	Asset Management
BNPP Asset Management Services Grouping	Asset Management
BNPP Best Selection Actions Euro (Ex- BNPP Actions Euroland)	Insurance
BNPP Capital Partners	Asset Management
BNPP Cardif	Insurance
BNPP Convictions	Insurance
BNPP CP Cardif Alternative	Insurance
BNPP CP Cardif Private Debt	Insurance
BNPP CP Infrastructure Investments Fund (Ex- Theam Infrastructure Investments fund)	Insurance

Locations	Business
BNPP Dealing Services	Asset Management
BNPP Deep Value (Ex- Camgestion Deep Value)	Insurance
BNPP Développement	Retail Banking
BNPP Développement Humain	Insurance
BNPP Développement Oblig	Retail Banking
BNPP Diversipierre	Insurance
BNPP Factor	Retail Banking
BNPP France Crédit	Insurance
BNPP Global Senior Corporate Loans	Insurance
BNPP Home Loan SFH	Property Companies (Property used in operations) and Others
BNPP Immobilier Promotion Immobilier d'Entreprise	Real Estate Services
BNPP Immobilier Résidences Services	Real Estate Services
BNPP Immobilier Résidentiel	Real Estate Services
BNPP Immobilier Résidentiel Service Clients	Real Estate Services
BNPP Indice Amerique du Nord	Insurance
BNPP IRB Participations	Europe-Mediterranean
BNPP Lease Group	Leasing Solutions
BNPP Midcap France	Insurance
BNPP Moderate Focus Italia	Insurance
BNPP Multistratégies Protection 80	Insurance
BNPP Nouvelle Calédonie	Retail Banking
BNPP Partners for Innovation	Property Companies (Property used in operations) and Others
BNPP Personal Finance	Personal Finance
BNPP Perspectives	Asset Management
BNPP Procurement Tech	Property Companies (Property used in operations) and Others
BNPP Protection Monde	Insurance
BNPP Public Sector SCF	Property Companies (Property used in operations) and Others
BNPP Real Estate	Real Estate Services
BNPP Real Estate Conseil Habitation & Hospitality	Real Estate Services
BNPP Real Estate Consult France	Real Estate Services
BNPP Real Estate Financial Partner	Real Estate Services
BNPP Real Estate Investment Management France	Real Estate Services
BNPP Real Estate Property Management France SAS	Real Estate Services
BNPP Real Estate Transaction France	Real Estate Services
BNPP Real Estate Valuation France	Real Estate Services
BNPP Réunion	Retail Banking
BNPP Securities Services	Securities Services
BNPP Sélection Dynamique Monde	Insurance
BNPP Sélection Flexible	Insurance
BNPP Smallcap Euroland	Insurance
C Santé	Insurance
Cafineo	Personal Finance
Camgestion Obliflexible	Insurance
CamGestion Obligations Europe	Insurance
Capital France Hotel	Insurance
Cardif Alternatives Part I	Insurance
Cardif Assurance Vie	Insurance
Cardif Assurances Risques Divers	Insurance
Cardif BNPP AM Frontier Markets (Ex- Cardif BNPP IP Equity Frontier Markets)	Insurance
Cardif BNPP IP Convertibles World	Insurance
Cardif BNPP IP Global Senior Corporate Loans	Insurance
Cardif BNPP IP Signatures	Insurance
Cardif BNPP IP Smid Cap Euro	Insurance
Cardif CPR Global Return	Insurance
Cardif Edrim Signatures	Insurance
Cardif IARD	Insurance
Cardif Vita Convex Fund Eur	Insurance
Cardimmo	Insurance
Carma Grand Horizon SARL	Insurance
Carrefour Banque	Personal Finance
Cedrus Carbon Initiative Trends	Insurance
CFH Bercy	Insurance
CFH Bercy Hotel	Insurance
CFH Bercy Intermédiaire	Insurance
CFH Boulogne	Insurance
CFH Cap d'Ail	Insurance
CFH Montmartre	Insurance
CFH Montparnasse	Insurance
Claas Financial Services	Leasing Solutions
CMV Mediforce	Leasing Solutions
CNH Industrial Capital Europe	Leasing Solutions
Cofica Bail	Personal Finance
Cofiparc	Arval
Cofiplan	Personal Finance
Compagnie d'Investissement Italiens	Corporate and Institutional Banking
Compagnie d'Investissement Opéra	Corporate and Institutional Banking
Compagnie pour le Financement des Loisirs	Retail Banking
Construction-Sale Companies	Real Estate Services

Locations	Business
Copartis	Retail Banking
Corosa	Insurance
Crédit Moderne Antilles Guyane	Personal Finance
Crédit Moderne Océan Indien	Personal Finance
Défense CB3 SAS	Insurance
Domofinance	Personal Finance
E carat 10	Personal Finance
Eclair	Insurance
Effico	Personal Finance
EP L	Insurance
Esomet	Corporate and Institutional Banking
Euro Secured Notes Issuer	Property Companies (Property used in operations) and Others
Euro Securities Partners	Retail Banking
Eurotitrisation	Corporate and Institutional Banking
FCT Juice	Corporate and Institutional Banking
FCT Laffitte 2016	Property Companies (Property used in operations) and Others
FCT Opéra 2014	Property Companies (Property used in operations) and Others
Financière des Italiens	Corporate and Institutional Banking
Financière des Paiements Electroniques	New Digital Businesses
Financière du Marché Saint Honoré	Corporate and Institutional Banking
Financière Paris Haussmann	Corporate and Institutional Banking
Financière Taitbout	Corporate and Institutional Banking
Fleur SAS	Insurance
Foncière Partenaires	Insurance
Fonds d'Investissements Immobiliers pour le Commerce et la Distribution	Insurance
Fortis Lease	Leasing Solutions
FP Cardif Convex Fund USD	Insurance
Fundquest Advisor	Asset Management
GIE BNPP Cardif	Insurance
GIE Groupement Auxiliaire de Moyens	Property Companies (Property used in operations) and Others
GIE Groupement d'Etudes et de Prestations	Property Companies (Property used in operations) and Others
GIE Ocean	Retail Banking
GIE Siège Issy	Real Estate Services
Hemisphere Holding	Insurance
Hibernia France	Insurance
High Street Retail	Insurance
Icare	Insurance
Icare Assurance	Insurance
JCB Finance	Leasing Solutions
Leval 20	Personal Finance
Lifizz	Real Estate Services
Loisirs Finance	Personal Finance
Louveo	Arval
Lyf SA	New Digital Businesses
Lyf SAS	New Digital Businesses
Mediterranea	Corporate and Institutional Banking
MFF	Leasing Solutions
Natio Assurance	Insurance
Natio Energie 2	Leasing Solutions
Natio Fonds Ampère 1	Insurance
Natio Fonds Athenes Investissement N 5	Insurance
Natio Fonds Colline International	Insurance
Natio Fonds Collines Investissement N 1	Insurance
Natio Fonds Collines Investissement N 3	Insurance
Natiocredibail	Leasing Solutions
Neuilly Contentieux	Personal Finance
New Alpha Cardif Incubator Fund	Insurance
Noria 2018-1	Personal Finance
Norrsken Finance	Personal Finance
Olympia SAS	Personal Finance
Opel Bank	Personal Finance
Opéra Rendement	Insurance
Optichamps	Corporate and Institutional Banking
Parilease	Corporate and Institutional Banking
Partecis	Retail Banking
Participations Opéra	Corporate and Institutional Banking
Partner's & Services	Real Estate Services
Paylib Services	Retail Banking
Permal Cardif Co Investment Fund	Insurance
Portzamparc (Ex- B*Capital)	Retail Banking
Preim Healthcare SAS	Insurance
Projeo	Personal Finance
Protection 24	Retail Banking
Public Location Longue Durée	Arval
PWH	Insurance
Reumal Investissements	Insurance
Rueil Ariane	Insurance

Locations	Business
Same Deutz Fahr Finance	Leasing Solutions
SAS HVP	Insurance
SCI 68/70 rue de Lagny - Montreuil	Insurance
SCI Alpha Park	Insurance
SCI BNPP Pierre I	Insurance
SCI BNPP Pierre II	Insurance
SCI Bobigny Jean Rostand	Insurance
SCI Bouleragny	Insurance
SCI Cardif Logement	Insurance
SCI Citylight Boulogne	Insurance
SCI Clichy Nuovo	Insurance
SCI Défense Etoile	Insurance
SCI Défense Vendôme	Insurance
SCI Etoile du Nord	Insurance
SCI Fontenay Plaisance	Insurance
SCI Imefa Velizy	Insurance
SCI Le Mans Gare	Insurance
SCI Liberté	Insurance
SCI Nanterre Guilleraies	Insurance
SCI Nantes Carnot	Insurance
SCI Odyssée	Insurance
SCI Pantin Les Moulins	Insurance
SCI Paris Batignolles	Insurance
SCI Paris Cours de Vincennes	Insurance
SCI Paris Turenne	Insurance
SCI Portes de Claye	Insurance
SCI Rue Moussorgski	Insurance
SCI Rueil Caudron	Insurance
SCI Saint Denis Landy	Insurance
SCI Saint Denis Mitterrand	Insurance
SCI Saint-Denis Jade	Insurance
SCI SCOO	Insurance
SCI Vendôme Athènes	Insurance
SCI Villeurbanne Stalingrad	Insurance
Secar	Insurance
Securitisation funds Domos	Personal Finance
Services Epargne Entreprise	Asset Management
Services Logiciels d'Intégration Boursière	Securities Services
SNC Natiocredimurs	Leasing Solutions
SNC Taitbout Participation 3	Corporate and Institutional Banking
Société Auxiliaire de Construction Immobilière	Real Estate Services
Société Francaise d'Assurances sur la Vie	Insurance
Société Lairoise de Participations	Retail Banking
Société Orbaisienne de Participations	Corporate and Institutional Banking
Symag	Personal Finance
Tikehau Cardif Loan Europe	Insurance
UCB Bail 2	Leasing Solutions
United Partnership	Personal Finance
Valeur Pierre Epargne	Insurance
Valtitres FCP	Insurance
Velizy SAS	Insurance
Verner Investissements	Corporate and Institutional Banking
Germany	
Arval Deutschland GmbH	Arval
BGL BNPP (Germany branch)	Retail Banking
BNPP 3 Step IT (Germany branch)	Leasing Solutions
BNPP Asset Management France (Germany branch)	Asset Management
BNPP Emissions- Und Handels- GmbH	Corporate and Institutional Banking
BNPP Factor GmbH	Retail Banking
BNPP Lease Group (Germany branch)	Leasing Solutions
BNPP Real Estate Consult GmbH	Real Estate Services
BNPP Real Estate GmbH	Real Estate Services
BNPP Real Estate Holding GmbH	Real Estate Services
BNPP Real Estate Investment Management Germany GmbH	Real Estate Services
BNPP Real Estate Property Development & Services GmbH (Ex- BNPP Real Estate Investment Management International GmbH)	Real Estate Services
BNPP Real Estate Property Management GmbH	Real Estate Services
BNPP SA (Germany branch)	Corporate and Institutional Banking
BNPP Securities Services (Germany branch)	Securities Services
Cardif Assurance Vie (Germany branch)	Insurance
Cardif Assurances Risques Divers (Germany branch)	Insurance
Claas Financial Services (Germany branch)	Leasing Solutions
CNH Industrial Capital Europe (Germany branch)	Leasing Solutions
Folea Grundstucksverwaltungs und Vermietungs Gmbh & Co	Leasing Solutions
Fortis Lease Deutschland GmbH	Leasing Solutions
Horizon GmbH	Insurance
JCB Finance (Germany branch)	Leasing Solutions
Opel Bank (Germany branch)	Personal Finance
Opel Leasing GmbH	Personal Finance
Seniorenzentren Reinbeck Oberursel München Objekt GmbH	Insurance
Seniorenzentrum Butzbach Objekt GmbH	Insurance
Seniorenzentrum Heilbronn Objekt GmbH	Insurance

Locations	Business
Seniorenzentrum Kassel Objekt GmbH	Insurance
Seniorenzentrum Wolfratshausen Objekt GmbH	Insurance
Greece	
Arval Hellas Car Rental SA	Arval
BNPP Securities Services (Greece branch)	Securities Services
Opel Bank (Greece branch)	Personal Finance
Hungary	
Arval Magyarorszag KFT	Arval
BNPP Real Estate Magyarorszag Tanacsado Es Ingatlankezelo ZRT	Real Estate Services
BNPP SA (Hungary branch)	Corporate and Institutional Banking
BNPP Securities Services (Hungary branch)	Securities Services
Cardif Biztosito Magyarorszag ZRT	Insurance
Magyar Cetelem Bank ZRT	Personal Finance
Oney Magyarorszag ZRT	Personal Finance
Ireland	
Alectra Finance PLC	Corporate and Institutional Banking
Aquarius +Investments PLC	Corporate and Institutional Banking
Aries Capital DAC	Corporate and Institutional Banking
BGZ Poland ABS1 DAC	Europe-Mediterranean
BNPP Fund Administration Services Ireland Ltd	Securities Services
BNPP Ireland Unlimited Co	Corporate and Institutional Banking
BNPP Prime Brokerage International Ltd	Corporate and Institutional Banking
BNPP Real Estate Advisory and Property Management Ireland Ltd	Real Estate Services
BNPP SA (Ireland branch)	Corporate and Institutional Banking
BNPP Securities Services (Ireland branch)	Securities Services
BNPP Vartry Reinsurance DAC	Corporate and Institutional Banking
Darnell DAC	Insurance
G C Thematic Opportunities II	Insurance
Greenval Insurance DAC	Arval
Madison Arbor Ltd	Corporate and Institutional Banking
Matchpoint Finance PLC	Corporate and Institutional Banking
SME Alternative Financing DAC	Asset Management
Utexam Logistics Ltd	Corporate and Institutional Banking
Utexam Solutions Ltd	Corporate and Institutional Banking
Italy	
Artigiancassa SPA	Retail Banking
Arval Service Lease Italia SPA	Arval
AutoFlorence 1 SRL	Personal Finance
Axepta SPA	Retail Banking
Banca Nazionale Del Lavoro SPA	Retail Banking
BNL Finance SPA	Retail Banking
BNL Leasing SPA	Leasing Solutions
BNPP 3 Step IT (Italy branch)	Leasing Solutions
BNPP Asset Management France (Italy branch)	Asset Management
BNPP Cardif Vita Compagnia di Assicurazione E Riassicurazione SPA	Insurance
BNPP Lease Group (Italy branch)	Leasing Solutions
BNPP Lease Group Leasing Solutions SPA	Leasing Solutions
BNPP Real Estate Advisory Italy SPA	Real Estate Services
BNPP Real Estate Investment Management Germany GmbH (Italy branch)	Real Estate Services
BNPP Real Estate Investment Management Italy SPA	Real Estate Services
BNPP Real Estate Italy SRL	Real Estate Services
BNPP Real Estate Property Developpement Italy SPA	Real Estate Services
BNPP Real Estate Property Management Italy SRL	Real Estate Services
BNPP Rental Solutions SPA	Leasing Solutions
BNPP SA (Italy branch)	Corporate and Institutional Banking
BNPP Securities Services (Italy branch)	Securities Services
Cardif Assurance Vie (Italy branch)	Insurance
Cardif Assurances Risques Divers (Italy branch)	Insurance
Cargeas Assicurazioni SPA	Insurance
CFH Algonquin Management Partners France Italia	Insurance
CFH Milan Holdco SRL	Insurance
Claas Financial Services (Italy branch)	Leasing Solutions
CNH Industrial Capital Europe (Italy branch)	Leasing Solutions
Diamante Re SRL	Corporate and Institutional Banking
EMF IT 2008 1 SRL	Retail Banking
Eutimm SRL	Retail Banking
Findomestic Banca SPA	Personal Finance
Florence SPV SRL	Personal Finance
Fundamenta	Insurance
Horti Milano SRL	Real Estate Services
International Factors Italia SPA	Retail Banking
JCB Finance (Italy branch)	Leasing Solutions
Opel Bank (Italy branch)	Personal Finance
Permicro SPA	Retail Banking
Serfactoring SPA	Retail Banking
Servizio Italia SPA	Retail Banking
Sviluppo HQ Tiburtina SRL	Retail Banking
Sviluppo Residenziale Italia SRL	Real Estate Services
Tierre Securitisation SRL	Retail Banking
Vela ABS SRL	Retail Banking
Vela Consumer 2 SRL	Retail Banking
Vela Consumer SRL	Retail Banking

Locations	Business
Vela Home SRL	Retail Banking
Vela Mortgages SRL	Retail Banking
Vela OBG SRL	Retail Banking
Vela RMBS SRL	Retail Banking
Luxemburg	
Arval Luxembourg SA	Arval
Auseter Real Estate Opportunities SARL	Corporate and Institutional Banking
Batipart Participations SAS	Insurance
BGL BNPP	Retail Banking
BNPP Asset Management Luxembourg	Asset Management
BNPP Fortis Funding SA	Retail Banking
BNPP Funds (Ex- Parvest)	Asset Management
BNPP L1	Asset Management
BNPP Lease Group Luxembourg SA	Retail Banking
BNPP Leasing Solutions	Leasing Solutions
BNPP Real Estate Advisory & Property Management Luxembourg SA	Real Estate Services
BNPP Real Estate Investment Management Luxembourg SA	Real Estate Services
BNPP SA (Luxembourg branch)	Corporate and Institutional Banking
BNPP SB Re	Retail Banking
BNPP Securities Services (Luxembourg branch)	Securities Services
Cardif Assurances Risques Divers (Luxembourg branch)	Insurance
Cardif Lux Vie	Insurance
Cofhylux SA	Retail Banking
Compagnie Financière Ottomane SA	Retail Banking
Ecarat SA	Personal Finance
Fund Channel	Asset Management
Greenstars BNPP	Corporate and Institutional Banking
Le Sphinx Assurances Luxembourg SA	Retail Banking
Lion International Investments SA	Retail Banking
Parworld	Asset Management
Rubin SARL	Insurance
Seniorenzentren Deutschland Holding SARL	Insurance
Société Immobilière du Royal Building SA	Insurance
Theam Quant	Asset Management
Visalux	Retail Banking
Netherlands	
Arval Benelux BV	Arval
Arval BV	Arval
BNPP 3 Step IT (Netherlands branch)	Leasing Solutions
BNPP Asset Management Nederland NV	Asset Management
BNPP Asset Management NL Holding NV	Asset Management
BNPP Cardif BV	Insurance
BNPP Cardif Levensverzekeringen NV	Insurance
BNPP Cardif Schadeverzekeringen NV	Insurance
BNPP Factor NV	Retail Banking
BNPP Factoring Support	Retail Banking
BNPP Invest Holdings BV	Corporate and Institutional Banking
BNPP Islamic Issuance BV	Corporate and Institutional Banking
BNPP Issuance BV	Corporate and Institutional Banking
BNPP Leasing Solutions NV	Leasing Solutions
BNPP Personal Finance BV	Personal Finance
BNPP Real Estate Advisory Netherlands BV	Real Estate Services
BNPP SA (Netherlands branch)	Corporate and Institutional Banking
BNPP Securities Services (Netherlands branch)	Securities Services
CNH Industrial Capital Europe BV	Leasing Solutions
Fortis Vastgoedlease BV	Leasing Solutions
Groeivermogen NV	Asset Management
Heffiq Heftruck Verhuur BV	Leasing Solutions
Opel Finance International BV	Personal Finance
Opel Finance NV	Personal Finance
Phedina Hypotheken 2010 BV	Personal Finance
Poland	
Arval Service Lease Polska SP ZOO	Arval
BGZ BNPP Faktoring Spolka ZOO	Europe-Mediterranean
BNPP Bank Polska SA (Ex- Bank BGZ BNPP SA)	Europe-Mediterranean
BNPP Lease Group SP ZOO	Leasing Solutions
BNPP Leasing Services	Leasing Solutions
BNPP Real Estate Poland SP ZOO	Real Estate Services
BNPP SA (Poland branch)	Corporate and Institutional Banking
BNPP Securities Services (Poland branch)	Securities Services
BNPP Solutions Spolka ZOO	Europe-Mediterranean
Cardif Assurances Risques Divers (Poland branch)	Insurance
Cardif Polska Towarzystwo Ubezpieczen Na Zycie SA	Insurance
Claas Financial Services (Poland branch)	Leasing Solutions
CNH Industrial Capital Europe (Poland branch)	Leasing Solutions
Portugal	
Arval Service Lease Aluger Operational Automoveis SA	Arval
Banco BNPP Personal Finance SA	Personal Finance
BNPP Factor Sociedade Financeira de Credito SA	Retail Banking
BNPP Lease Group (Portugal branch)	Leasing Solutions
BNPP Real Estate Portugal Unipersonal LDA	Real Estate Services
BNPP SA (Portugal branch)	Corporate and Institutional Banking

Locations	Business
BNPP Securities Services (Portugal branch)	Securities Services
Cardif Assurance Vie (Portugal branch)	Insurance
Cardif Assurances Risques Divers (Portugal branch)	Insurance
Cardif Services AEIE	Insurance
Fortis Lease Portugal	Leasing Solutions
Romania	
Arval Service Lease Romania SRL	Arval
BNPP Leasing Solutions IFN SA	Leasing Solutions
BNPP Personal Finance (Romania branch)	Personal Finance
BNPP Real Estate Advisory SA	Real Estate Services
BNPP SA (Romania branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Romania branch)	Insurance
Cardif Assurances Risques Divers (Romania branch)	Insurance
RD Leasing IFN SA	Leasing Solutions
Slovakia	
Arval Slovakia SRO	Arval
BNPP Personal Finance (Slovakia branch)	Personal Finance
Poistovna Cardif Slovakia AS	Insurance
Spain	
Arval Service Lease SA	Arval
Autonoria Spain 2019	Personal Finance
Banco Cetelem SAU	Personal Finance
BNPP Factor (Spain branch)	Retail Banking
BNPP Fortis (Spain branch)	Corporate and Institutional Banking
BNPP Lease Group (Spain branch)	Leasing Solutions
BNPP Real Estate Investment Management Germany GmbH (Spain branch)	Real Estate Services
BNPP Real Estate Investment Management Spain SA	Real Estate Services
BNPP Real Estate Spain SA (Ex- BNPP Real Estate Advisory Spain SA)	Real Estate Services
BNPP SA (Spain branch)	Corporate and Institutional Banking
BNPP Securities Services (Spain branch)	Securities Services
Cardif Assurance Vie (Spain branch)	Insurance
Cardif Assurances Risques Divers (Spain branch)	Insurance
Cariboo Development SL	Real Estate Services
Cetelem Gestion AIE	Personal Finance
Cetelem Servicios Informaticos AIE	Personal Finance
Claas Financial Services (Spain branch)	Leasing Solutions
CNH Industrial Capital Europe (Spain branch)	Leasing Solutions
Ejesur SA	Corporate and Institutional Banking
Financière des Paiements Electroniques (succ. Espagne)	New Digital Businesses
Fortis Lease Iberia SA	Leasing Solutions
GCC Consumo Establecimiento Financiero de Credito SA	Personal Finance
Opel Bank (Spain branch)	Personal Finance
Ribera Del Loira Arbitrage	Corporate and Institutional Banking
Securitisation funds UCI and RMBS Prado	Personal Finance
Servicios Financieros Carrefour EFC SA	Personal Finance
Union de Creditos Inmobiliarios SA	Personal Finance
Sweden	
Alfred Berg Kapitalforvaltning AB	Asset Management
Alfred Berg Kapitalforvaltning AS (Sweden branch)	Asset Management
Arval AB	Arval
BNPP Factor AB	Retail Banking
BNPP SA (Sweden branch)	Corporate and Institutional Banking
Cardif Forsakring AB	Insurance
Cardif Livforsakring AB	Insurance
Cardif Nordic AB	Insurance
Ekspres Bank AS (Sweden branch)	Personal Finance
United Kingdom	
Arval UK Group Ltd	Arval
Arval UK Leasing Services Ltd	Arval
Arval UK Ltd	Arval
BNP PUK Holding Ltd	Corporate and Institutional Banking
BNPP 3 Step IT (United Kingdom branch)	Leasing Solutions
BNPP Asset Management UK Ltd	Asset Management
BNPP Commercial Finance Ltd	Retail Banking
BNPP Fleet Holdings Ltd	Arval
BNPP Lease Group PLC	Leasing Solutions
BNPP Lease Group Rentals Ltd	Leasing Solutions
BNPP Leasing Solutions Ltd	Leasing Solutions
BNPP Net Ltd	Corporate and Institutional Banking
BNPP Real Estate Advisory & Property Management UK Ltd	Real Estate Services
BNPP Real Estate Facilities Management Ltd	Real Estate Services
BNPP Real Estate Investment Management Ltd	Real Estate Services
BNPP Real Estate Investment Management UK Ltd	Real Estate Services
BNPP Real Estate Property Development UK Ltd	Real Estate Services
BNPP Rental Solutions Ltd	Leasing Solutions
BNPP SA (United Kingdom branch)	Corporate and Institutional Banking
BNPP Securities Services (United Kingdom branch)	Securities Services
Cardif Pinnacle Insurance Holdings PLC	Insurance
Cardif Pinnacle Insurance Management Services PLC	Insurance
Claas Financial Services Ltd	Leasing Solutions
CNH Industrial Capital Europe Ltd	Leasing Solutions
Cofinoga Funding Two LP	Personal Finance

Locations	Business
Commercial Vehicle Finance Ltd	Leasing Solutions
Creation Consumer Finance Ltd	Personal Finance
Creation Financial Services Ltd	Personal Finance
Ecarat UK	Personal Finance
Fortis Lease UK Ltd	Leasing Solutions
Fundquest Advisor (United Kingdom branch)	Asset Management
Harewood Helena 1 Ltd	Asset Management
Harewood Helena 2 Ltd	Insurance
Impax Asset Management Group PLC	Asset Management
JCB Finance Holdings Ltd	Leasing Solutions
Laser ABS 2017 Holding Ltd	Personal Finance
Laser ABS 2017 PLC	Personal Finance
Manitou Finance Ltd	Leasing Solutions
Parker Tower Ltd	Real Estate Services
Pinnacle Insurance PLC	Insurance
REPD Parker Ltd	Real Estate Services
Sygma Funding Two Ltd	Personal Finance
Vauxhall Finance PLC	Personal Finance
Other European countries	
Guernsey	
BNPP Suisse SA (Guernsey branch)	Territory of Switzerland
BNPP Securities Services (Guernsey branch)	Securities Services
Jersey	
BNPP SA (Jersey branch)	Corporate and Institutional Banking
BNPP Securities Services (Jersey branch)	Securities Services
Scaldis Capital Ltd	Corporate and Institutional Banking
Monaco	
BNPP SA (Monaco branch)	Retail Banking
BNPP Wealth Management Monaco	Wealth Management
Norway	
Alfred Berg Kapitalforvaltning AS	Asset Management
Arval AS Norway	Arval
BNPP Leasing Solution AS	Leasing Solutions
BNPP SA (Norway branch)	Corporate and Institutional Banking
Cardif Forsakring AB (Norway branch)	Insurance
Cardif Livforsakring AB (Norway branch)	Insurance
Ekspres Bank AS (Norway branch)	Personal Finance
Russia	
Arval LLC	Arval
BNPP Bank JSC	Corporate and Institutional Banking
Cardif Insurance Co LLC	Insurance
Cetelem Bank LLC	Personal Finance
Serbia	
TEB SH A	Europe-Mediterranean
Switzerland	
Arval Schweiz AG	Arval
BNPP Leasing Solutions Suisse SA	Leasing Solutions
BNPP Securities Services (Switzerland branch)	Securities Services
BNPP Suisse SA	Territory of Switzerland
Cardif Assurance Vie (Switzerland branch)	Insurance
Cardif Assurances Risques Divers (Switzerland branch)	Insurance
Opel Finance SA	Personal Finance
Ukraine	
UkrSibbank Public JSC	Europe-Mediterranean
Africa & Mediterranean basin	
Algeria	
Cetelem Algérie	Personal Finance
BNPP El Djazair	Europe-Mediterranean
Cardif El Djazair	Insurance
Bahrain	
BNPP SA (Bahrain branch)	Corporate and Institutional Banking
Burkina Faso	
Banque Internationale pour le Commerce et l'Industrie du Burkina Faso	Europe-Mediterranean
Comoros	
Banque pour l'Industrie et le Commerce des Comores	Europe-Mediterranean
Gabon	
Banque Internationale pour le Commerce et l'Industrie du Gabon	Europe-Mediterranean
Guinea	
Banque Internationale pour le Commerce et l'Industrie de la Guinée	Europe-Mediterranean
Ivory Coast	
Banque Internationale pour le Commerce et l'Industrie de la Côte d'Ivoire	Europe-Mediterranean
BICI Bourse	Europe-Mediterranean
Kuwait	
BNPP SA (Kuwait branch)	Corporate and Institutional Banking
Mali	
Banque Internationale pour le Commerce et l'Industrie du Mali	Europe-Mediterranean
Morocco	
Arval Maroc SA	Arval
Banque Marocaine pour le Commerce et l'Industrie	Europe-Mediterranean
Banque Marocaine pour le Commerce et l'Industrie Banque Offshore	Europe-Mediterranean
BDSI	Europe-Mediterranean
BMCI Leasing	Europe-Mediterranean

Locations	Business
Qatar	
BNPP SA (Qatar branch)	Corporate and Institutional Banking
Saudi Arabia	
BNPP SA (Saudi arabia branch)	Corporate and Institutional Banking
BNPP Investment Co KSA	Corporate and Institutional Banking
Senegal	
Banque Internationale pour le Commerce et l'Industrie du Sénégal	Europe-Mediterranean
South Africa	
BNPP Personal Finance South Africa Ltd	Personal Finance
BNPP SA (South Africa branch)	Corporate and Institutional Banking
RCS Cards Pty Ltd	Personal Finance
Tunisia	
Union Bancaire pour le Commerce et l'Industrie	Europe-Mediterranean
Turkey	
Bantas Nakit AS	Europe-Mediterranean
BNPP Cardif Emeklilik AS	Insurance
BNPP Cardif Hayat Sigorta AS	Insurance
BNPP Cardif Sigorta AS	Insurance
BNPP Finansal Kiralama AS	Leasing Solutions
BNPP Fortis Yatirimlar Holding AS	Europe-Mediterranean
BNPP Yatirimlar Holding AS	Europe-Mediterranean
TEB Arval Arac Filo Kiralama AS	Arval
TEB Faktoring AS	Europe-Mediterranean
TEB Finansman AS	Personal Finance
TEB Holding AS	Europe-Mediterranean
TEB Portfoy Yonetimi AS	Europe-Mediterranean
TEB Yatirim Menkul Degerler AS	Europe-Mediterranean
Turk Ekonomi Bankasi AS	Europe-Mediterranean
United Arab Emirates	
BNPP SA (United Arab Emirates branch)	Corporate and Institutional Banking
BNPP Real Estate (United Arab Emirates branch)	Real Estate Services
Americas	
Argentina	
BNPP SA (Argentina branch)	Corporate and Institutional Banking
Cardif Seguros SA	Insurance
Cardif Servicios SA	Insurance
Bermuda	
Decart Re Ltd	Corporate and Institutional Banking
Brazil	
Arval Brasil Ltda	Arval
Banco BNPP Brasil SA	Corporate and Institutional Banking
Banco Cetelem SA	Personal Finance
BGN Mercantil E Servicos Ltda	Personal Finance
BNPP Asset Management Brasil Ltda	Asset Management
BNPP EQD Brazil Fund Fundo de Investmento Multimercado	Corporate and Institutional Banking
BNPP Proprietario Fundo de Investimento Multimercado	Corporate and Institutional Banking
Cardif do Brasil Seguros e Garantias SA	Insurance
Cardif do Brasil Vida e Previdencia SA	Insurance
Cardif Ltda	Insurance
Cetelem America Ltda	Personal Finance
Cetelem Servicos Ltda	Personal Finance
Luizaseg	Insurance
NCVP Participacoes Societarias SA	Insurance
Canada	
BNPP Canada Corp	Corporate and Institutional Banking
BNPP IT Solutions Canada Inc	Corporate and Institutional Banking
BNPP Leasing Solutions Canada Inc	Retail Banking
BNPP SA (Canada branch)	Corporate and Institutional Banking
Cayman Islands	
BNPP SA (Cayman islands branch)	Corporate and Institutional Banking
Chile	
Arval Relsa SPA	Arval
Bancoestado Administradora General de Fondos SA	Asset Management
BNPP Cardif Seguros de Vida SA	Insurance
BNPP Cardif Seguros Generales SA	Insurance
BNPP Cardif Servicios y Asistencia Ltda	Insurance
Colombia	
BNPP Colombia Corporacion Financiera SA	Corporate and Institutional Banking
Cardif Colombia Seguros Generales SA	Insurance
Mexico	
Cardif Mexico Seguros de Vida SA de CV	Insurance
Cardif Mexico Seguros Generales SA de CV	Insurance
Cetelem SA de CV	Personal Finance
Cetelem Servicios SA de CV	Personal Finance
Panama	
BNPP SA (Panama branch)	Corporate and Institutional Banking
Peru	
BNPP Cardif Compania de Seguros y Reaseguros SA	Insurance
Cardif Servicios SAC	Insurance
United States of America	
BancWest Holding Inc	Retail Banking
BancWest Holding Inc Grantor Trust ERC Subaccount	Retail Banking

Locations	Business
BancWest Investment Services Inc	Retail Banking
Bank of the West	Retail Banking
Bank of the West Auto Trust 2018-1	Retail Banking
Bank of the West Auto Trust 2019-1 (Ex- Bank of the West Auto Trust 2018-2)	Retail Banking
Bank of the West Auto Trust 2019-2	Retail Banking
BNPP Asset Management USA Holdings Inc	Asset Management
BNPP Asset Management USA Inc	Asset Management
BNPP Capital Services Inc	Corporate and Institutional Banking
BNPP Energy Trading GP	Corporate and Institutional Banking
BNPP Energy Trading LLC	Corporate and Institutional Banking
BNPP Financial Services LLC	Securities Services
BNPP Fortis (United States branch)	Corporate and Institutional Banking
BNPP FS LLC	Corporate and Institutional Banking
BNPP RCC Inc	Corporate and Institutional Banking
BNPP SA (United States branch)	Corporate and Institutional Banking
BNPP Securities Corp	Corporate and Institutional Banking
BNPP US Investments Inc (Ex- BNPP Energy Trading Holdings Inc)	Corporate and Institutional Banking
BNPP US Wholesale Holdings Corp	Corporate and Institutional Banking
BNPP USA Inc	Corporate and Institutional Banking
BNPP VPG Adonis LLC	Corporate and Institutional Banking
BNPP VPG Brookfin LLC	Corporate and Institutional Banking
BNPP VPG Brookline Cre LLC	Corporate and Institutional Banking
BNPP VPG CT Holdings LLC	Corporate and Institutional Banking
BNPP VPG EDMC Holdings LLC	Corporate and Institutional Banking
BNPP VPG Express LLC	Corporate and Institutional Banking
BNPP VPG Master LLC	Corporate and Institutional Banking
BOW Auto Receivables LLC	Retail Banking
BWC Opportunity Fund 2 Inc	Retail Banking
BWC Opportunity Fund Inc	Retail Banking
CFB Community Development Corp	Retail Banking
Claas Financial Services LLC	Retail Banking
Commercial Federal Affordable Housing Inc	Retail Banking
Commercial Federal Community Development Corp	Retail Banking
Commercial Federal Insurance Corp	Retail Banking
Commercial Federal Investment Service Inc	Retail Banking
Dale Bakken Partners 2012 LLC	Corporate and Institutional Banking
First Santa Clara Corp	Retail Banking
FSI Holdings Inc	Corporate and Institutional Banking
Liberty Leasing Co	Retail Banking
Starbird Funding Corp	Corporate and Institutional Banking
Ursus Real Estate Inc	Retail Banking
Asia & Pacific	
Australia	
BNPP SA (Australia branch)	Corporate and Institutional Banking
BNPP Fund Services Australasia Pty Ltd	Securities Services
BNPP Securities Services (Australia branch)	Securities Services
China	
Bank of Nanjing	Europe-Mediterranean
BNPP China Ltd	Corporate and Institutional Banking
BNPP Commodities Trading Shanghai Co Ltd	Corporate and Institutional Banking
BOB Cardif Life Insurance Co Ltd	Insurance
Genius Auto Finance Co Ltd	Personal Finance
Haitong Fortis Private Equity Fund Management Co Ltd	Asset Management
HFT Investment Management Co Ltd	Asset Management
Suning Consumer Finance Co Ltd	Personal Finance
Hong Kong	
BNPP Arbitrage Hong Kong Ltd	Corporate and Institutional Banking
BNPP Asset Management Asia Ltd	Asset Management
BNPP Finance Hong Kong Ltd	Corporate and Institutional Banking
BNPP SA (Hong Kong branch)	Corporate and Institutional Banking
BNPP Securities Asia Ltd	Corporate and Institutional Banking
BNPP Securities Services (Hong Kong branch)	Securities Services
India	
Arval India Private Ltd	Arval
BNPP Asset Management India Private Ltd	Asset Management
BNPP Global Securities Operations Private Ltd	Securities Services
BNPP India Holding Private Ltd	Corporate and Institutional Banking
BNPP India Solutions Private Ltd	Corporate and Institutional Banking
BNPP SA (India branch)	Corporate and Institutional Banking
BNPP Securities India Private Ltd	Corporate and Institutional Banking
Geojit Technologies Private Ltd	Personal Investors
Human Value Developers Private Ltd	Personal Investors
Sharekhan BNPP Financial Services Private Ltd	Personal Investors
Sharekhan Commodities Private Ltd	Personal Investors
Sharekhan Ltd	Personal Investors
Indonesia	
Bank BNPP Indonesia PT	Corporate and Institutional Banking
BNPP Asset Management PT (Ex- BNPP Investment Partners PT)	Asset Management
BNPP Sekuritas Indonesia PT	Corporate and Institutional Banking
Japan	
BNPP Asset Management Japan Ltd	Asset Management
BNPP SA (Japan branch)	Corporate and Institutional Banking
BNPP Securities Japan Ltd	Corporate and Institutional Banking
Cardif Life Insurance Japan	Insurance
Cardif Non Life Insurance Japan	Insurance
Malaysia	
BNPP Malaysia Berhad	Corporate and Institutional Banking
BNPP SA (Malaysia branch)	Corporate and Institutional Banking
New Zealand	
BNPP Fund Services Australasia Pty Ltd (New zealand branch)	Securities Services
Philippines	
BNPP SA (Philippines branch)	Corporate and Institutional Banking
Republic of Korea	
BNPP Cardif General Insurance Co Ltd	Insurance
BNPP SA (Republic of Korea branch)	Corporate and Institutional Banking
BNPP Securities Korea Co Ltd	Corporate and Institutional Banking
Cardif Life Insurance Co Ltd	Insurance
Shinhan BNPP Asset Management Co Ltd	Asset Management
Singapore	
BNPP Real Estate Singapore Pte Ltd	Real Estate Services
BNPP SA (Singapore branch)	Corporate and Institutional Banking
BNPP Securities Services (Singapore branch)	Securities Services
BPP Holdings Pte Ltd	Corporate and Institutional Banking
Taiwan	
BNPP Cardif TCB Life Insurance Co Ltd	Insurance
BNPP SA (Taiwan branch)	Corporate and Institutional Banking
BNPP Securities Taiwan Co Ltd	Corporate and Institutional Banking
Cardif Assurance Vie (Taiwan branch)	Insurance
Cardif Assurances Risques Divers (Taiwan branch)	Insurance
Paris Management Consultant Co Ltd	Insurance
Thailand	
BNPP SA (Thailand branch)	Corporate and Institutional Banking
Viet Nam	
BNPP SA (Viet nam branch)	Corporate and Institutional Banking
Vietcombank Cardif Life Insurance Co Ltd	Insurance

II. PROFIT AND LOSS ACCOUNT ITEMS AND HEADCOUNT BY COUNTRY

	FY 2019(*) *(in EUR million)*						Financial headcount(**) as at 31 December 2019
	Revenues	Public subsidies received	Income before Tax	Current tax expense	Defered tax	Corporate income tax	
European Union member States							
Austria	64	0	(5)	(2)	0	(3)	285
Belgium	4,468	0	1,531	(159)	(181)	(340)	13,515
Bulgaria	74	0	24	(3)	0	(3)	919
Czech Republic	103	0	25	0	(5)	(6)	744
Denmark	89	0	12	(2)	(1)	(3)	278
Finland	4	0	0	0	0	0	32
France	14,038	0	2,139	(767)	33	(734)	56,285
Germany	1,799	0	399	(99)	(22)	(120)	5,207
Greece	7	0	0	0	0	0	58
Hungary	75	0	23	(2)	2	0	495
Ireland	254	0	123	(15)	0	(15)	559
Italy	5,159	0	1,414	(373)	(18)	(391)	18,366
Luxemburg	1,240	0	487	(115)	17	(97)	3,643
Netherlands	305	0	69	(12)	(3)	(16)	966
Portugal	226	0	87	(26)	(1)	(26)	5,936
Poland	1,111	0	229	(51)	(19)	(70)	10,528
Romania	89	0	19	(3)	(2)	(5)	911
Slovakia	27	0	3	(1)	0	(1)	342
Spain	1,200	0	582	(123)	(29)	(151)	3,809
Sweden	55	0	1	(3)	0	(3)	269
United Kingdom	3,227	0	842	(173)	(3)	(176)	7,649
Other European countries							
Guernsey	10	0	2	0	0	0	22
Jersey	38	0	5	0	1	0	214
Monaco	66	0	30	(2)	0	(2)	195
Norway	54	0	(1)	0	1	0	156
Russia	58	0	27	(2)	(2)	(4)	370
Serbia	33	0	15	(2)	0	(2)	601
Switzerland	435	0	(29)	(10)	76	67	1,385
Ukraine	219	0	98	(5)	(4)	(9)	5,427
Africa & Mediterranean basin							
Algeria	127	0	45	(21)	8	(14)	1,336
Bahrain	20	0	(44)	0	0	0	276
Burkina Faso	22	0	4	(1)	0	(1)	239
Comoros	3	0	0	0	0	0	68
Guinea	34	0	7	(2)	0	(2)	320
Ivory Coast	78	0	7	0	0	0	694
Kuwait	8	0	3	(1)	0	(1)	21
Mali	14	0	2	(1)	0	(1)	79
Morocco	295	0	101	(37)	(6)	(43)	3,404
Qatar	25	0	10	(1)	0	(1)	25
Saudi Arabia	21	0	2	(1)	0	(1)	51
Senegal	57	0	14	(6)	1	(5)	485
South Africa	183	0	63	(17)	0	(17)	1,639
Tunisia	80	0	31	(12)	0	(12)	1,137
Turkey	1,003	0	284	(97)	30	(66)	9,847
United Arab Emirates	45	0	17	(5)	1	(4)	76
Americas							
Argentina	37	0	(6)	(9)	12	3	217
Bermuda	0	0	0	0	0	0	0
Brazil	647	0	185	(59)	(1)	(61)	1,542
Canada	48	0	35	(9)	(2)	(11)	816
Cayman Islands(1)	8	0	8	0	0	0	0
Chile	87	0	46	(9)	(1)	(10)	449
Colombia	70	0	31	(13)	1	(12)	357
Mexico	83	0	39	(11)	(1)	(13)	281
Panama(2)	0	0	0	0	0	0	0
United States of America	4,296	0	940	(132)	(37)	(167)	13,174
Asia & Pacific							
Australia	178	0	53	0	(14)	(14)	486
China	149	0	71	(20)	(1)	(22)	422
Hong Kong	704	0	(17)	(20)	(2)	(22)	2,375
India	264	0	152	(66)	4	(62)	10,617
Indonesia	71	0	24	(10)	2	(8)	161
Japan	500	0	259	(65)	(16)	(81)	689
Malaysia	37	0	21	(5)	0	(5)	98
New Zealand	10	0	5	(1)	0	(1)	43
Philippines	0	0	(1)	0	0	0	0
Republic of Korea	119	0	37	0	(10)	(9)	349
Singapore	501	0	101	(12)	(1)	(14)	2,026
Taiwan	179	0	91	(12)	(5)	(17)	495
Thailand	26	0	9	(3)	0	(2)	79
Viet Nam	41	0	27	(7)	2	(5)	89
GROUP TOTAL	**44,597**	**0**	**10,807**	**(2,615)**	**(196)**	**(2,811)**	**193,628**

(*) The financial data correspond to the contribution income of fully consolidated entities under exclusive control

(**) Financial headcount: Full-Time Equivalents (FTE) at 31 December 2019 in wholly controlled, fully consolidated entities

(1) The income of the entity in the Cayman Islands is taxed in the United States and its staff is also located in the United States

(2) The liquidation process of the entity located in Panama, initiated in July 2010, is pending approval from the local regulator

8.7 Founding documents and Articles of association

SECTION I

FORM – NAME – REGISTERED OFFICE – CORPORATE PURPOSE

Article 1

BNP PARIBAS is a French Public Limited Company *(société anonyme)* licensed to conduct banking operations under the French Monetary and Financial Code, Book V, Section 1 *(Code Monétaire et Financier, Livre V, Titre 1er)* governing banking sector institutions.

The Company was founded pursuant to a decree dated 26 May 1966. Its legal life has been extended to 99 years with effect from 17 September 1993.

Apart from the specific rules relating to its status as an establishment in the banking sector (Book V, Section 1 of the French Monetary and Financial Code - *Code Monétaire et Financier, Livre V, Titre 1er*), BNP PARIBAS shall be governed by the provisions of the French Commercial Code *(Code de Commerce)* concerning commercial companies, as well as by these Articles of Association.

Article 2

The registered office of BNP PARIBAS shall be located in Paris *(9th arrondissement)*, at 16, Boulevard des Italiens (France).

Article 3

The purpose of BNP PARIBAS shall be to provide and carry out the following services with any individual or legal entity, in France and abroad, subject to compliance with the French laws and regulations applicable to credit institutions licensed by the Credit Institutions and Investment Firms Committee *(Comité des Établissements de Crédit et des Entreprises d'Investissement)*:

- any and all investment services;
- any and all services related to investment services;
- any and all banking transactions;
- any and all services related to banking transactions;
- any and all equity investments;

as defined in the French Monetary and Financial Code Book III – Section 1 *(Code Monétaire et Financier, Livre III, Titre 1er)* governing banking transactions and Section II *(Titre II)* governing investment services and related services.

On a regular basis, BNP PARIBAS may also conduct any and all other activities and any and all transactions in addition to those listed above, in particular any and all arbitrage, brokerage and commission transactions, subject to compliance with the regulations applicable to banks.

In general, BNP PARIBAS may, on its own behalf, and on behalf of third parties or jointly therewith, perform any and all financial, commercial, industrial or agricultural, personal property or real estate transactions directly or indirectly related to the activities set out above or which further the accomplishment thereof.

SECTION II

SHARE CAPITAL - SHARES

Article 4

The share capital of BNP PARIBAS shall stand at 2,499,597,122 euros divided into 1,249,798,561 fully paid-up shares with a nominal value of 2 euros each.

Article 5

The fully paid-up shares shall be held in registered or bearer form at the shareholder's discretion, subject to the French laws and regulations in force.

The shares shall be registered in an account in accordance with the terms and conditions set out in the applicable French laws and regulations in force. They shall be assigned by transfer from one account to another.

The Company may request disclosure of information concerning the ownership of its shares in accordance with the provisions of Article L. 228-2 of the French Commercial Code *(Code de Commerce)*.

Without prejudice to the legal thresholds set in Article L. 233-7, paragraph 1 of the French Commercial Code *(Code de Commerce)*, any shareholder, whether acting alone or in concert, who comes to directly or indirectly hold at least 0.5% of the share capital or voting rights of BNP PARIBAS, or any multiple of that percentage less than 5%, shall be required to notify BNP PARIBAS by registered letter with return receipt within the timeframe set out in Article L. 233-7 of the French Commercial Code *(Code de Commerce)*.

Above 5%, the disclosure obligation provided for in the previous paragraph shall apply to 1% increments of the share capital or voting rights.

The disclosures described in the previous two paragraphs shall also apply when the shareholding falls below the above-mentioned thresholds.

Failure to report either legal or statutory thresholds shall result in the loss of voting rights as provided for by Article L. 233-14 of the French Commercial Code *(Code de Commerce)* at the request of one or more shareholders jointly holding at least 2% of the Company's share capital or voting rights.

Article 6

Each share shall grant a right to a part of ownership of the Company's assets and any liquidation surplus that is equal to the proportion of share capital that it represents.

In cases where it is necessary to hold several shares in order to exercise certain rights, and in particular where shares are exchanged, combined or allocated, or following an increase or reduction in share capital, regardless of the terms and conditions thereof, or subsequent to a merger or any other transaction, it shall be the responsibility of those shareholders owning less than the number of shares required to exercise those rights to combine their shares or, if necessary, to purchase or sell the number of shares or voting rights leading to ownership of the required percentage of shares.

8

SECTION III

GOVERNANCE

Article 7

The Company shall be governed by a Board of Directors composed of:

1/ Directors appointed by the Ordinary General Shareholders' Meeting

There shall be at least nine and no more than eighteen Directors. Directors elected by the employees shall not be included when calculating the minimum and maximum number of Directors.

They shall be appointed for a three-year term.

When a Director is appointed to replace another Director, in accordance with applicable French laws and regulations in force, the new Director's term of office shall be limited to the remainder of the predecessor's term.

A Director's term of office shall end at the close of the Ordinary General Shareholders' Meeting convened to deliberate on the financial statements for the previous financial year and held in the year during which the Director's term of office expires.

Directors may be re-appointed, subject to the provisions of French law, in particular with regard to their age.

Each Director, including Directors elected by employees, must own at least 10 Company shares.

2/ Directors elected by BNP PARIBAS SA employees

The status of these Directors and the related election procedures shall be governed by Articles L. 225-27 to L. 225-34 of the French Commercial Code *(Code de Commerce)* as well as by the provisions of these Articles of Association.

There shall be two such Directors – one representing executive staff and the other representing non-executive staff.

They shall be elected by BNP PARIBAS SA employees.

They shall be elected for a three-year term.

Elections shall be organised by the Executive Management. The timetable and terms and conditions for elections shall be drawn up by the Executive Management in consultation with the national trade union representatives within the Company such that the second round of elections shall be held no later than fifteen days before the end of the term of office of the outgoing Directors.

Each candidate shall be elected on a majority basis after two rounds held in each of the electoral colleges.

Each application submitted during the first round of elections shall include both the candidate's name and the name of a substitute, if any.

Applications may not be amended during the second round of elections.

The candidates shall belong to the electoral college where they stand for election.

Applications other than those presented by a trade union representative within the Company must be submitted together with a document including the names and signatures of one hundred electors belonging to the electoral college where the candidate is presenting for election.

Article 8

The Chairman of the Board of Directors shall be appointed from among the members of the Board of Directors.

Upon proposal from the Chairman, the Board of Directors may appoint one or more Vice-Chairmen.

Article 9

The Board of Directors shall meet as often as necessary in the best interests of the Company. Board meetings shall be convened by the Chairman. Where requested by at least one-third of the Directors, the Chairman may convene a Board meeting with respect to a specific agenda, even if the last Board meeting was held less than two months before. The Chief Executive Officer (CEO) may also request that the Chairman convene a Board meeting to discuss a specific agenda.

Board meetings shall be held either at the Company's registered office, or at any other location specified in the notice of meeting.

Notices of meetings may be communicated by any means, including verbally.

The Board of Directors may meet and make valid decisions at any time, even if no notice of meeting has been communicated, provided all its members are present or represented.

Article 10

Board meetings shall be chaired by the Chairman, by a Director recommended by the Chairman for such purpose or, failing this, by the oldest Director present.

Any Director may attend a Board meeting and take part in its deliberations by videoconference (visioconférence) or all telecommunications and remote transmission means, including Internet, subject to compliance with the conditions set out in applicable legislation at the time of its use.

Any Director who is unable to attend a Board meeting may ask to be represented by a fellow Director, by granting a written proxy, valid for only one specific meeting of the Board. Each Director may represent only one other Director.

At least half of the Board members must be present for decisions taken at Board meetings to be valid.

Should one or both of the offices of Director elected by employees remain vacant, for whatever reason, without the possibility of a replacement as provided for in Article L. 225-34 of the French Commercial Code *(Code de Commerce)*, the Board of Directors shall be validly composed of the members elected by the General Shareholders' Meeting and may validly meet and vote.

Members of the Company's Executive Management may, at the request of the Chairman, attend Board meetings in an advisory capacity.

A permanent member of the Company's Central Works Committee, appointed by said Committee, shall attend Board meetings in an advisory capacity, subject to compliance with the provisions of French laws in force.

Decisions shall be made by a majority of Directors present or represented. In the event of a split decision, the Chairman of the meeting shall have the casting vote, except as regards the proposed appointment of the Chairman of the Board of Directors.

The Board of Directors' deliberations shall be recorded in minutes entered in a special register prepared in accordance with French laws in force and signed by the Chairman of the meeting and one of the Directors who attended the meeting.

The Chairman of the meeting shall appoint the Secretary to the Board, who may be chosen from outside the Board's members.

Copies or excerpts of Board minutes may be signed by the Chairman, the Chief Executive Officer, the Chief Operating Officers (COOs) or any representative specifically authorised for such purpose.

Article 11

The Ordinary General Shareholders' Meeting may grant Directors' attendance fees under the conditions provided for by French law.

The Board of Directors shall split these fees among its members as it deems appropriate.

The Board of Directors may grant exceptional compensation for specific assignments or duties performed by the Directors under the conditions applicable to agreements subject to approval, in accordance with the provisions of Articles L. 225-38 to L. 225-43 of the French Commercial Code *(Code de Commerce)*. The Board may also authorise the reimbursement of travel and business expenses and any other expenses incurred by the Directors in the interests of the Company.

SECTION IV

DUTIES OF THE BOARD OF DIRECTORS, THE CHAIRMAN, THE EXECUTIVE MANAGEMENT AND THE NON-VOTING DIRECTORS *(CENSEURS)*

Article 12

The Board of Directors shall determine the business strategy of BNP PARIBAS and supervise the implementation thereof. Subject to the powers expressly conferred on the Shareholders' Meetings and within the limit of the corporate purpose, the Board shall handle any issue concerning the smooth running of BNP PARIBAS and settle matters concerning the Company pursuant to its deliberations. The Board of Directors shall receive from the Chairman or the Chief Executive Officer all of the documents and information required to fulfil its duties.

The Board of Directors' decisions shall be carried out either by the Chairman, the Chief Executive Officer or the Chief Operating Officers, or by any special representative appointed by the Board.

Upon proposal from the Chairman, the Board of Directors may decide to set up committees responsible for performing specific tasks.

Article 13

The Chairman shall organise and manage the work of the Board of Directors and report thereon to the General Shareholders' Meeting. The Chairman shall also oversee the smooth running of BNP PARIBAS's management bodies and ensure, in particular, that the Directors are in a position to fulfil their duties.

The remuneration of the Chairman of the Board shall be freely determined by the Board of Directors.

Article 14

The Board of Directors shall decide how to organise the Executive Management of the Company: the Executive Management of the Company shall be conducted, under his responsibility, either by the Chairman of the Board of Directors or by another individual appointed by the Board of Directors and who shall have the title of Chief Executive Officer.

Shareholders and third parties shall be informed of this choice in accordance with the regulatory provisions in force.

The Board of Directors shall have the right to decide that this choice be for a fixed term.

In the event that the Board of Directors decides that the Executive Management shall be conducted by the Chairman of the Board, the provisions of these Articles of Association concerning the Chief Executive Officer shall apply to the Chairman of the Board of Directors who will in such case have the title of Chairman and Chief Executive Officer. He shall be deemed to have automatically resigned at the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches sixty-five years of age.

In the event that the Board of Directors decides to dissociate the functions of Chairman and Chief Executive Officer, the Chairman shall be deemed to have automatically resigned at the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches seventy-two years of age. However, the Board may decide to extend the term of office of the Chairman of the Board until the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches seventy-three years of age. The Chief Executive Officer shall be deemed to have automatically resigned at the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches sixty-five years of age. However, the Board may decide to extend the term of office of the Chief Executive Officer until the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches sixty-six years of age.

Article 15

The Chief Executive Officer shall be vested with the broadest powers to act in all circumstances in the name of BNP PARIBAS. He shall exercise these powers within the limit of the corporate purpose and subject to those powers expressly granted by French law to Shareholders' Meetings and the Board of Directors.

He shall represent BNP PARIBAS in its dealings with third parties. BNP PARIBAS shall be bound by the actions of the Chief Executive Officer even if such actions are outside the scope of the corporate purpose, unless BNP PARIBAS can prove that the third party knew that the relevant action was outside the scope of the corporate purpose or had constructive knowledge thereof in view of the circumstances. The publication of the Company's Articles of Association alone shall not constitute such proof.

The Chief Executive Officer shall be responsible for the organisation and procedures of internal control and for all information required by French law regarding the internal control report.

The Board of Directors may limit the powers of the Chief Executive Officer, but such limits shall not be binding as against third parties.

The Chief Executive Officer may delegate partial powers, on a temporary or permanent basis, to as many persons as he sees fit, with or without the option of redelegation.

The remuneration of the Chief Executive Officer shall be freely determined by the Board of Directors.

The Chief Executive Officer may be removed from office by the Board of Directors at any time. Damages may be payable to the Chief Executive Officer if he is removed from office without a valid reason, except where the Chief Executive Officer is also the Chairman of the Board of Directors.

In the event that the Chief Executive Officer is a Director, the term of his office as Chief Executive Officer shall not exceed that of his term of office as a Director.

Article 16

Upon proposal from the Chief Executive Officer, the Board of Directors may, within the limits of French law, appoint one or more individuals, who shall have the title of Chief Operating Officer, responsible for assisting the Chief Executive Officer.

In agreement with the Chief Executive Officer, the Board of Directors shall determine the scope and term of the powers granted to the Chief Operating Officers. However, as far as third parties are concerned, the Chief Operating Officers shall have the same powers as the Chief Executive Officer.

When the Chief Executive Officer ceases to perform his duties or is prevented from doing so, the Chief Operating Officers shall, unless the Board of Directors decides otherwise, retain their functions and responsibilities until a new Chief Executive Officer is appointed.

The remuneration of the Chief Operating Officers shall be freely determined by the Board of Directors, at the proposal of the Chief Executive Officer.

The Chief Operating Officers may be removed from office by the Board of Directors at any time, at the proposal of the Chief Executive Officer. Damages may be payable to the Chief Operating Officers if they are removed from office without a valid reason.

Where a Chief Operating Officer is a Director, the term of his office as Chief Operating Officer may not exceed that of his term of office as a Director.

The term of office of the Chief Operating Officers shall expire at the latest at the close of the General Shareholders' Meeting convened to approve the financial statements for the year in which the Chief Operating Officers reach sixty-five years of age. However, the Board may decide to extend the term of office of the Chief Operating Officers until the close of the General Shareholders' Meeting held to approve the financial statements for the year in which they reach sixty-six years of age.

Article 17

Upon proposal from the Chairman, the Board of Directors may appoint one or two non-voting Directors *(censeurs)*.

Non-voting Directors shall be convened to and take part in Board meetings in an advisory capacity.

They shall be appointed for six years and may be reappointed for further terms. They may also be removed at any time under similar conditions.

They shall be selected from among the Company's shareholders and may receive a remuneration determined by the Board of Directors.

SECTION V

SHAREHOLDERS' MEETINGS

Article 18

General Shareholders' Meetings shall be composed of all shareholders.

General Shareholders' Meetings shall be convened and deliberate subject to compliance with the provisions of the French Commercial Code *(Code de Commerce)*.

As an exception to the last paragraph of article L.225-123 of the French Commercial Code *(Code de Commerce)*, each share carries one voting right, and no double voting rights are conferred.

They shall be held either at the registered office or at any other location specified in the notice of meeting.

They shall be chaired by the Chairman of the Board of Directors, or, in his absence, by a Director appointed for this purpose by the Shareholders' Meeting.

Any shareholder may, subject to providing proof of identity, attend a General Shareholders' Meeting, either in person, or by returning a postal vote or by designating a proxy.

Taking part in the meeting is subject to the shares having been entered either in the BNP PARIBAS' registered share accounts in the name of the shareholder, or in the bearer share accounts held by the authorised intermediary, within the timeframes and under the conditions provided for by the French regulations in force. In the case of bearer shares, the authorised intermediary shall provide a certificate of participation for the shareholders concerned.

The deadline for returning postal votes shall be determined by the Board of Directors and stated in the notice of meeting published in the French Bulletin of Compulsory Legal Announcements (*Bulletin des Annonces Légales Obligatoires* – BALO).

At all General Shareholders' Meetings, the voting right attached to the shares bearing beneficial rights shall be exercised by the beneficial owner.

If the Board of Directors so decides at the time that the General Shareholders' Meeting is convened, the public broadcasting of the entire General Shareholders' Meeting by videoconference (visioconférence) or all telecommunications and remote transmission means, including Internet, shall be authorised. Where applicable, this decision shall be communicated in the notice of meeting published in the French Bulletin of Compulsory Legal Announcements (*Bulletin des Annonces Légales Obligatoires* – BALO).

Any shareholder may also, if the Board of Directors so decides at the time of convening the General Shareholders' Meeting, take part in the vote by videoconference (visioconférence) or all telecommunications and remote transmission means, including Internet, subject to compliance with the conditions set out in the applicable laws at the time of its use. If an electronic voting form is used, the shareholder's signature may be in the form of a secured digital signature or a reliable identification process safeguarding the link with the document to which it is attached and may consist, in particular, of a user identifier and a password. Where applicable, this decision shall be communicated in the notice of meeting published in the French Bulletin of Compulsory Legal Announcements (*Bulletin des Annonces Légales Obligatoires* – BALO).

SECTION VI

STATUTORY AUDITORS

Article 19

At least two principal statutory auditors and at least two substitute statutory auditors shall be appointed by the General Shareholders' Meeting for a term of six financial years. Their term of office shall expire after approval of the financial statements for the sixth financial year.

SECTION VII

ANNUAL FINANCIAL STATEMENTS

Article 20

The Company's financial year shall start on 1st January and end on 31st December.

At the end of each financial year, the Board of Directors shall draw up annual financial statements and write a management report on the Company's financial position and its business activities during the previous year.

Article 21

Net income for the year is composed of income for the year minus costs, depreciation, amortizations and impairment.

The distributable profit is made up of the year's profit, minus previous losses as well as the sums to be allocated to the reserves in accordance with French law, plus the profit carried forward.

The General Shareholders' Meeting is entitled to levy all sums from the distributable profit to allocate them to all optional, ordinary or extraordinary reserves or to carry them forward.

The General Shareholders' Meeting may also decide to distribute sums levied from the reserves at its disposal.

However, except in the event of a capital reduction, no amounts may be distributed to the shareholders if the shareholders' equity is, or would become following such distribution, lower than the amount of capital plus the reserves which is not open to distribution pursuant to French law or these Articles of Association.

In accordance with the provisions of Article L. 232-18 of the French Commercial Code *(Code de Commerce)*, a General Shareholders' Meeting may offer to the shareholders an option for the payment, in whole or in part, of dividends or interim dividends through the issuance of new shares in the Company.

SECTION VIII

DISSOLUTION

Article 22

Should BNP PARIBAS be dissolved, the shareholders shall determine the form of liquidation, appoint the liquidators at the proposal of the Board of Directors and, in general, take on all of the duties of the General Shareholders' Meeting of a French Public Limited Company *(société anonyme)* during the liquidation and until such time as it has been completed.

SECTION IX

DISPUTES

Article 23

Any and all disputes that may arise during the life of BNP PARIBAS or during its liquidation, either between the shareholders themselves or between the shareholders and BNP PARIBAS, pursuant to these Articles of Association, shall be ruled on in accordance with French law and submitted to the courts having jurisdiction.

8.8 Statutory Auditors' special report on related party agreements and commitments

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
6, place de la Pyramide 92908 Paris La Défense Cedex	63, rue de Villiers 92208 Neuilly-sur-Seine Cedex	61, rue Henri Regnault 92400 Courbevoie

Annual General Meeting for the approval of the financial statements for the year ended 31 December 2019

This is a free translation into English of the Statutory Auditors' special report on related party agreements issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,
BNP Paribas SA
16 boulevard des Italiens
75009 PARIS

In our capacity as Statutory Auditors of BNP Paribas SA, we hereby report to you on related party agreements.

It is our responsibility to report to shareholders, based on the information provided to us, on the main terms and conditions of, as well as the reasons provided for, the agreements that have been disclosed to us or that we may have identified as part of our engagement, without commenting on their relevance or substance or identifying any undisclosed agreements. Under the provisions of article R.225-31 of the French Commercial Code (Code de commerce), it is the responsibility of the shareholders to determine whether the agreements are appropriate and should be approved.

Where applicable, it is also our responsibility to provide shareholders with the information required by article R.225-31 of the French Commercial Code in relation to the implementation during the year of agreements already approved by the Annual General Meeting.

We performed the procedures that we deemed necessary in accordance with professional standards applicable in France to such engagements. These procedures consisted in verifying that the information given to us is consistent with the underlying documents.

AGREEMENTS TO BE SUBMITTED FOR THE APPROVAL OF THE ANNUAL GENERAL MEETING

We were not informed of any agreement authorised and entered into during the year to be submitted for approval at the Annual General Meeting in accordance with article L.225-38 of the French Commercial Code.

AGREEMENTS PREVIOUSLY APPROVED BY THE ANNUAL GENERAL MEETING

Agreements approved in previous years

In accordance with article R.225-30 of the French Commercial Code, we were informed that the following agreements, previously approved by the Annual General Meeting on 26 May 2016, were implemented during the year.

Non-compete agreement between BNP Paribas and Jean-Laurent Bonnafé (authorised by the Board of Directors on 25 February 2016)

Director concerned:

Jean-Laurent Bonnafé, Director

Chief Executive Officer of BNP Paribas

At its meeting on 25 February 2016, the Board of Directors of BNP Paribas authorised the implementation of a non-compete agreement between BNP Paribas and Jean-Laurent Bonnafé.

Under this agreement, in the event that Jean-Laurent Bonnafé ceases to hold a position with BNP Paribas or carry out any work on its behalf, he undertakes not to exercise, directly or indirectly, any professional activity for a period of 12 months on behalf of a banking, investment or insurance firm whose shares are traded on a regulated market in France or abroad, or on behalf of a banking, investment or insurance firm in France whose shares are not traded on a regulated market. As consideration for this non-compete obligation, Jean-Laurent Bonnafé will receive a payment equal to 1.2 times the total of the fixed and variable remuneration (excluding multi-annual variable remuneration) he received during the year preceding his departure. One-twelfth of the indemnity would be paid each month.

This agreement was concluded to protect the interests of BNP Paribas and its shareholders in the event of Jean-Laurent Bonnafé's departure.

Paris La Défense, Neuilly-sur-Seine and Courbevoie, 3 March 2020

The Statutory Auditors

Deloitte & Associés	**PricewaterhouseCoopers Audit**	**Mazars**
Laurence Dubois	Patrice Morot	Virginie Chauvin

9 STATUTORY AUDITORS

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9.1 Statutory Auditors

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
6, place de la Pyramide	63, rue de Villiers	61, rue Henri Regnault
92908 Paris-La Défense Cedex	92208 Neuilly-sur-Seine Cedex	92400 Courbevoie

- Deloitte & Associés was re-appointed as Statutory Auditor at the Annual General Meeting of 24 May 2018 for a six-year period expiring at the close of the Annual General Meeting called in 2024 to approve the financial statements for the year ending 31 December 2023. The firm was first appointed at the Annual General Meeting of 23 May 2006.

Deloitte & Associés is represented by Laurence Dubois

Deputy:

Société BEAS, 6, place de la Pyramide, Paris-La Défense Cedex (92), France, SIREN No. 315 172 445, Nanterre trade and companies register.

- PricewaterhouseCoopers audit was re-appointed as Statutory Auditor at the Annual General Meeting of 24 May 2018 for a six-year period expiring at the close of the Annual General Meeting called in 2024 to approve the financial statements for the year ending 31 December 2023. The firm was first appointed at the Annual General Meeting of 26 May 1994.

PricewaterhouseCoopers Audit is represented by Patrice Morot.

Deputy:

Jean-Baptiste Deschryver, 63, rue de Villiers, Neuilly-sur-Seine (92).

- Mazars was re-appointed as Statutory Auditor at the Annual General Meeting of 24 May 2018 for a six-year period expiring at the close of the Annual General Meeting called in 2024 to approve the financial statements for the year ending 31 December 2023. The firm was first appointed at the Annual General Meeting of 23 May 2000.

Mazars is represented by Virginie Chauvin.

Deputy:

Charles de Boisriou, 28 rue Fernand Forest, Suresnes (92).

Deloitte & Associés, PricewaterhouseCoopers and Mazars are registered as Statutory Auditors with the Versailles Regional Association of Statutory Auditors, under the authority of the French National Accounting Oversight Board *(Haut Conseil du Commissariat aux Comptes)*.

10 PERSON RESPONSIBLE FOR THE UNIVERSAL REGISTRATION DOCUMENT

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10.2	**Statement by the person responsible for the Universal registration document**	**610**

10.1 Person responsible for the Universal registration document and the annual financial report

Jean-Laurent BONNAFÉ, Chief Executive Officer of BNP Paribas.

10.2 Statement by the person responsible for the Universal registration document

I hereby declare that to the best of my knowledge, and having taken all reasonable precautions, the information contained in the Universal registration document is in accordance with the facts and contains no omission likely to affect its import.

I further declare that to the best of my knowledge, the financial statements are prepared in accordance with applicable accounting standards and give a true and fair view of the assets, liabilities, financial position, and profit or loss of the Company and all the entities included in the consolidation, and that the information provided in the management report (whose contents are listed in the Table of Concordance on page 611) includes a fair review of the development and performance of the business, profit or loss and financial position of the Company and all the entities included in the consolidation, and that it describes the principal risks and uncertainties that they face.

I obtained a statement from the Statutory Auditors, Deloitte & Associés, PricewaterhouseCoopers Audit, and Mazars, at the end of their assignment, in which they confirm having verified the information regarding the financial position and the accounts contained herewithin, and having examined the entire Universal registration document.

Paris, 3 March 2020

Chief Executive Officer
Jean-Laurent BONNAFÉ

11 TABLES OF CONCORDANCE

In order to assist readers of the Universal Registration Document, the following concordance cross-references the main headings required by Annex 1 of European Regulation 2017/1129 (Annex I), taken in application of the Directive known as "Prospectus 3" and refers to the pages of this universal registration document where information relating to each of the headings is mentioned.

Headings as listed by Annex I of European Commission Regulation (EC) No. 2017/1129		Page
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Pursuant to annexe I of Regulation (EU) 2017/1129, the following items are incorporated by reference:

- The consolidated financial statements for the year ended 31 December 2018 and the Statutory Auditors' report on the consolidated financial statements at 31 December 2018, presented respectively on pages 149-269 and 270-276 of Registration Document no. D.19-0114 filed with the AMF on 5 March 2019; The information is available via the following link: https://invest.bnpparibas.com/sites/default/files/documents/ddr_2018_bnp_paribas_gb.pdf
- The consolidated financial statements for the year ended 31 December 2017 and the Statutory Auditors' report on the consolidated financial statements at 31 December 2017, presented respectively on pages 137-236 and 237-242 of Registration Document no. D.18-0101 filed with the AMF on 6 March 2018; The information is available via the following link: https://invest.bnpparibas.com/sites/default/files/documents/ddr2017_bnp_paribas_gb.pdf
- The consolidated financial statements for the year ended 31 December 2016 and the Statutory Auditors' report on the consolidated financial statements at 31 December 2016, presented respectively on pages 131-231 and 232-233 of Registration Document no. D.17-0132 filed with the AMF on 7 March 2017; The information is available via the following link: https://invest.bnpparibas.com/sites/default/files/documents/ddr2016gb.pdf

In order to assist readers of the annual financial report, the following table cross-references the information required by article L.451-1-2 of the French Monetary and Financial Code.

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Management report	

The concordance table below makes it possible to identify in the Universel Registration Document filed with the *Autorité des Marchés Financiers* au 3 March 2020 the information that constitutes the Management report of the Company (including the Report on corporate governance) and the Consolidated Management report, as required by legal and regulatory provisions.

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