

BNP PARIBAS FORTIS SA/NV

PILLAR 3 DISCLOSURE FOR THE YEAR 2018



BNP PARIBAS
FORTIS

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INTRODUCTION

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.

The Basel reform measures (known as Basel III), will 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 IV)¹ and Regulation (EU) No. 575/2013 of 26 June 2013 (CRR)², which together constitute the corpus of texts known as “Basel III”.

In application of article 13 of the CRR, BNP Paribas Fortis (hereinafter also referred to as the ‘Bank’) is considered as a “significant subsidiary”. Being part of the Group BNP Paribas, BNP Paribas Fortis is not subject to a full reporting concerning the Pillar 3 disclosures but can limit its disclosures to the ones required by specific articles of the CRR. These disclosures include quantitative and qualitative information on the capital structure and on the capital requirements. Information on the remuneration policies is also provided.

The information presented in this document, along with the Additional Pillar 3 disclosures, reflects the entirety of the risks carried by BNP Paribas Fortis on a consolidated basis. It provides a comprehensive description of BNP Paribas Fortis’ Risk Management organisation and a quantitative and qualitative overview of BNP Paribas Fortis’ risk exposure at year-end 2018.

The Additional Pillar 3 disclosures at year-end 2018 of BNP Paribas Fortis are also available under the following link: <https://www.bnpparibasfortis.com/investors/financial-reports>.

BNP Paribas Fortis’ risk measures are presented according to the Basel III principles. These risks are calculated using methods approved by the Belgian banking regulator, i.e. the National Bank of Belgium (NBB), and are measured and managed as consistently as possible with the BNP Paribas risk methodologies.

Further details on the BNP Paribas Group’s approach to the measuring and managing of risks resulting from banking activities can be found in the Registration Document and Annual Financial Reports of BNP Paribas under the following link: <https://invest.bnpparibas.com/en/registration-documents-annual-financial-reports>.

All amounts in the tables of the Pillar 3 report are denominated in millions of euros, unless stated otherwise.

Certain reclassifications have been made with regard to the prior year’s report in order to make them comparable for the year under review. Figures have not been rounded off.

¹ Capital Requirements Directive

² Capital Requirements Regulation
Pillar 3 disclosure

1. RISK MANAGEMENT ORGANISATION

1.a. Mission and organisation

Risk management is key in the banking business. At BNP Paribas Group, operating methods and procedures throughout the organisation are geared towards addressing risks effectively. The entire process is supervised primarily by the RISK department, which is responsible for measuring and controlling risks at Group level. RISK is independent from the Core Business divisions, Business Lines and territories and reports directly to Group Executive Management.

The guiding principles of the mission and organisation of BNP Paribas Fortis' RISK department are aligned:

- with the mission of BNP Paribas RISK namely to:
 - advise the Bank's management on risk appetite and policy;
 - provide a 'second pair of eyes' so that risks taken by the Bank are aligned with its policies and are compatible with its profitability and solvency objectives;
 - report to and alert Bank management, Core Business division heads and the special committee of the Board of Directors on the status of the risks to which the Bank is exposed;
 - ensure compliance with banking regulations in the risk area, in liaison with other relevant group functions.
- and with its organisational principles:
 - a single integrated RISK entity, which is responsible for risk aspects across all businesses;
 - independent from business-line management;
 - organised with local and global reporting lines (matrix principle).

The BNP Paribas Fortis RISK department was integrated into the BNP Paribas RISK function in November 2009. The Chief Risk Officer (CRO) of BNP Paribas Fortis is a Member of the Executive Board and also has a reporting line to the BNP Paribas Head of RISK Domestic Markets. The CRO has no hierarchical link to the heads of businesses or heads of countries. This structure is designed to:

- ensure objective risk control;
- ensure that swift, objective and complete information is provided in the event of increased risk;
- maintain a single set of high-quality risk management standards throughout the Bank;
- ensure that the Bank's risk professionals implement and further develop methods and procedures of the highest quality in line with its international competitors' best practices.

The CRO heads the various RISK functions:

- RISK Enterprise Risk Architecture is responsible for the regulatory affairs, RISK analytics and modelling, RISK strategic analysis, reporting and provisioning, RISK ALM – treasury and liquidity;
- RISK CIB is tasked to provide full transparency and a dynamic analysis of market & counterparty risks to all BNP Paribas Fortis businesses and is responsible for the management of credit risks on Financial Institutions, on Sovereigns and on Corporates belonging to BNP Paribas Fortis CIB;
- RISK Belgian Retail Banking is responsible for the management of credit risks arising from all Business Lines within the perimeter of BNP Paribas Fortis (Retail & Private Banking Belgium, Corporate Banking excl CIB);
- RISK Function COO is responsible for risk systems, operational permanent control (ensuring second-line control of the RISK function and of business continuity), the Risk Operating Office (coordinating the non-core support functions), change management projects and communication;
- RISK IRC (Risk Independent Review & Control) is responsible for the independent review of credit, market, counterparty, insurance and operational risk;

- RISK ORC (Operational Risk & Control) BNP Paribas Fortis Belgium provides reasonable assurance of the existence and the efficient functioning of an operational permanent control framework within BNP Paribas Fortis in Belgium that meets the supervisory requirements of BNP Paribas Fortis as well as those of BNP Paribas Group.
- RISK DPO (Data Protection Officer) is responsible for monitoring compliance against personal data privacy and protection regulatory requirements.

Outside Belgium, alongside the existing local and global reporting lines, the CROs of companies that remain within the BNP Paribas Fortis perimeter report to the CRO of BNP Paribas Fortis in order to ensure compliance with internal and external rules.

The key principle of the Bank's overall risk governance (covering all risk types including credit, market, counterparty, liquidity risk, operational risk, etc.) is the double-walled defence, as stated in the BNP Paribas Fortis Risk Policy that is reviewed by the Executive Board and the Audit, Risk & Compliance Committee.

The primary responsibility for risk lies with the businesses (first line of defence), which are responsible for the approval, monitoring and management of the risks arising from their activities.

The RISK function provides a 'second pair of eyes', helping to ensure that the risks taken by the Bank are compliant and compatible with its policies; it represents the second line of defence in accordance with the mission stated above, contributing strongly to joint decision making with the businesses and increasing the emphasis on risk monitoring and controls.

1.b. BNP Paribas Fortis Risk committees

- Audit Committee (AC): in accordance with article 27 of the Belgian Banking Law, BNP Paribas Fortis is required to set up a separate audit committee to assist the board of directors with audit related matters. Prior to the entering into force of the Belgian Banking Law, the audit committee was part of the Audit, Risk and Compliance Committee (the 'ARCC'). The competences of the audit committee are set forth in the Belgian Banking Law and are listed herewith: finance, internal control and risk management, internal audit and external audit. The audit committee shall, upon request of the board of directors, assist (and make recommendations to) the board of directors in all audit and accounting related matters.
- Risk Committee (RC): in accordance with article 27 of the Belgian Banking Law, BNP Paribas Fortis is required to set up a separate risk committee to assist the board of directors with risk related matters. Prior to the entering into force of the Belgian Banking Law, the risk committee was part of the ARCC. The risk committee shall, upon request of the board of directors, assist (and make recommendations to) the board of directors in all risk related matters. In addition, several special competences of the risk committee are set forth in article 29 of the Belgian Banking Law and are listed herewith: (i) risk tolerance, (ii) price setting and (iii) remuneration policy. More detailed information can be found in the Annual Report under "Corporate Governance Statement", point 2, "Governing bodies".
- Central Credit Committee: the highest Credit Committee of BNP Paribas Fortis, which acts in line with the authority of the delegations held by its members (CEO and Heads of Business Lines, together with the CRO and other senior Risk representatives); it ensures that customer-level credit decisions are taken within the desired credit risk profile, the formulated credit policies and the Bank's legal lending limits.
- Capital Markets Risk Committee: defines and enforces the risk strategy, policies, methods and thresholds for capital markets, including investment portfolios, at activity and transaction levels.
- Risk Policy Committee: defines the risk profile at portfolio level, approves policies, reviews exposures and examines risks in the light of market conditions, business strategy and profitability, and enforces risk decisions.
- Bank Asset and Liability Committee: manages the liquidity position of the bank and the interest rate risk and foreign exchange risk in the Banking Book.
- Committee on Impairments and Provisions: makes final decisions on consolidated provisions and impairments.
- Exceptional Transactions Committee: validates and approves exceptional transactions.
- New Activity Committee: validates and approves new activities and products, including any significant changes in current activities.

2. RISK MEASUREMENT AND CATEGORIES

2.a. Risk measurement

Risk measurement is a crucial step in the risk management process.

To assess and measure risks, BNP Paribas Fortis uses several qualitative and/or quantitative methodologies. These range from regular reporting on matters such as concentration and quantitative and qualitative portfolio overviews to more sophisticated quantitative risk models for estimating internal risk parameters. The latter include probability of default, loss given default, exposure at default and expected loss (for credit risk) and Value at Risk (for market risk).

The development and review of these models, and their validation, are subject to Bank-wide standards in order to ensure adequacy and consistency.

The monitoring of the observed risk parameters, stress tests and model-based expectations are then compared to a framework of limits and risk guidelines.

Ultimately, all these risk measurements, together with stress tests, are then consolidated in risk dashboards, which provide a general overview for senior management. These aggregation documents are intended to provide a basis for well-founded decisions and are subject to on-going improvement.

2.b. Risk taxonomy

The risk categories reported below evolve in line with methodological developments at BNP Paribas and regulatory requirements.

1. *Credit and counterparty risk*

Credit risk is the risk of incurring a loss on financial assets (existing or potential due to commitments given) resulting from a change in the credit quality of the Bank's debtors, which may ultimately result in default. 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.

Credit risk is measured at portfolio level, taking into account correlations between the values of the loans and receivables making up the portfolio.

Counterparty risk is the credit risk embedded in payments or transactions between counterparties. Those transactions typically include bilateral contracts such as over-the-counter (OTC) derivative contracts, which expose the Bank to the risk of counterparty default. The amount of this risk may vary over time in line with changing market parameters, which in turn impacts the replacement value of the relevant transactions or portfolio.

2. *Market risk*

Market risk is the risk of incurring a loss of value (or a loss of interest income in the case of interest rate risk due to banking intermediation activities) due to adverse changes in market prices or parameters (rates), whether quoted in the market or not.

Quoted market parameters include, but are not limited to, foreign 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-quoted parameters are those based on working assumptions such as parameters contained in models or based on statistical or economic analyses, non-ascertainable in the market.

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 relating to banking activities encompasses the risk of loss on equity holdings on the one hand, and the interest rate and foreign exchange risks stemming from banking intermediation activities on the other hand.

3. 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 human resources risks, legal risks, tax risks, information system risks, misprocessing risks, risks relating to published financial information and the financial implications resulting from compliance and reputational risk.

4. Compliance and reputational risk

Compliance risk is the risk of legal, administrative or disciplinary sanctions, together with the significant financial loss that a bank may suffer as a result of its failure to comply with all the laws, regulations, codes of conduct and standards of good practice applicable to banking and financial activities, including instructions given by an executive body, particularly in the application of guidelines issued by a supervisory body.

By definition, compliance 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.

Reputational risk is the risk of damaging the trust placed in a corporation by its customers, counterparties, suppliers, employees, shareholders, regulators and any other stakeholder whose trust is an essential condition for the corporation to carry out its day-to-day operations.

Reputational risk is primarily contingent on all the other risks borne by the Bank.

5. Asset-liability management risk

Asset-liability management risk is the risk of incurring a loss as a result of mismatches in interest rates, maturities or nature between assets and liabilities. Asset-liability management risk arises in non-trading portfolios and primarily relates to global interest rate risk.

6. Liquidity and refinancing risk

Liquidity and refinancing risk is the risk of the Bank being unable to fulfil its obligations at an acceptable price in a given place and currency.

3. CAPITAL ADEQUACY

3.a. Framework

As a credit institution, BNP Paribas Fortis is subject to regulatory supervision.

The Belgian Banking Act of 25 April 2014 on the status and the supervision of credit institutions aligns the Belgian legislation in accordance with the EU regulatory framework. The Capital Requirements Directive (CRD IV) is the legal framework for the supervision of credit institutions in all Member States of the European Union and is the basis of the Single Supervisory Mechanism (SSM), composed of the European Central Bank (ECB) and the national competent authorities, such as the National Bank of Belgium (NBB). The Capital Requirements Regulation (CRR) was published under reference number 575/2013 on June 26th 2013 in the Official Journal of the European Union and is in force as of June 27th 2013, while the supervised entities within its scope are subject to it as of January 1st 2014.

As such BNP Paribas Fortis is supervised, at consolidated and statutory level, by the ECB and the NBB. BNP Paribas Fortis' subsidiaries may also be subject to regulation by various supervisory authorities in the countries where these subsidiaries operate.

Regulators require banks to hold a minimum level of qualifying capital under the 1st Pillar of the Basel III framework.

Since January 1st 2014, BNP Paribas Fortis has been computing its qualifying capital and its risk-weighted assets under the CRR/CRD IV.

The NBB (previously the CBFA, which was the former Belgian supervisor) has granted to BNP Paribas Fortis its approval for using the advanced approaches for calculating the risk-weighted assets under the Basel regulations: Advanced Internal Ratings Based Approach for credit and market risk and Advanced Measurement Approach for operational risk.

Some subsidiaries of BNP Paribas Fortis have not received such approval and therefore use the Standardised Approach for calculating risk-weighted assets.

3.b. Breakdown of regulatory capital

Qualifying capital for regulatory purpose is calculated at consolidated level based on IFRS accounting standards, taking into account prudential filters and deductions imposed by the regulator, as described in the CRR/CRD IV and transposed into the Belgian Banking Law published in April 2014.

The table below details the composition of the regulatory capital of BNP Paribas Fortis:

<i>In millions of euros</i>	31 December 2018	
	Basel III (transitional**)	of which transitional arrangements (*)
Capital instruments and the related share premium accounts	11,905	-
Retained earnings	9,137	-
Accumulated other comprehensive income (and other reserves)	(700)	-
Funds for general banking risk	-	-
Minority interests (amount allowed in consolidated CET 1)	1,667	-
Independently reviewed interim profits net of any foreseeable charge or dividend	934	-
COMMON EQUITY TIER 1 (CET1) CAPITAL BEFORE REGULATORY ADJUSTMENTS	22,943	-
Common Equity Tier 1 (CET1) : regulatory adjustments	(3,757)	-
COMMON EQUITY TIER 1 (CET1) CAPITAL	19,186	-
Additional Tier 1 (AT1) capital : instruments	499	205
Additional Tier 1 (AT1) capital : regulatory adjustments	-	-
ADDITIONAL TIER 1 (AT1) CAPITAL	499	205
TIER 1 CAPITAL (T1 = CET1 + AT1)	19,685	205
Tier 2 (T2) capital : instruments and provisions	2,993	87
Tier 2 (T2) capital : regulatory adjustments	(206)	-
TIER 2 (T2) CAPITAL	2,787	87
TOTAL CAPITAL (TC = T1 + T2)	22,472	293

(*) By virtue of regulation (EU) N° 575/2013

(**) The new regulatory requirements are progressively implemented (phase-in) as from the 1st of January 2014 until the 1st of January 2019, which means that capital adequacy ratios are presented on a 'phase-in' or 'fully-loaded' basis.

Key capital indicators (phase-in)

<i>In millions of euros</i>	31 December 2018	31 December 2017
Common Equity Tier 1 Capital	19,186	21,370
Tier 1 Capital	19,685	21,817
Total Capital	22,472	23,658
Risk Weighted Commitments		
Credit risk	113,741	117,241
Securitisation	654	480
Counterparty Risk	2,186	1,800
Equity Risk	7,014	7,577
Market risk	1,843	1,659
Operational risk	12,821	11,471
Total Risk Weighted Commitments	138,259	140,227
Common Equity Tier 1 ratio	13.9%	15.2%
Tier 1 ratio	14.2%	15.6%
Total capital ratio	16.3%	16.9%

Leverage ratio (phase-in)

<i>In millions of euros</i>	31 December 2018	31 December 2017
On-Balance Exposure (Excl. Repo & Derivatives)	265,577	259,919
Repo's and Derivatives	28,960	22,272
o/w Securities Financing Transactions	25,316	18,574
o/w Derivatives - Market Value	2,864	2,390
o/w Derivatives - Add-On	3,362	3,428
o/w Cash variation margins	(2,582)	(2,121)
Off-Balance Exposure (adjusted for conversion to credit equivalent. art.429 CRR)	29,054	42,205
Total Exposure	323,591	324,396
Regulatory adjustments	(3,757)	(3,896)
Tier 1 capital	19,685	21,818
Leverage Ratio	6.2%	6.8%

The table below shows the minimum Capital requirement ratios for CET1, T1 and total Own Funds.

	31 December 2018
CET1: minimum requirement Pillar 1	4,50%
Pillar 2R	1,00%
Capital conservation buffer (CCB)	1,875%
Systemically important institution buffer (O-SII Buffer)	1,50%
Countercyclical buffer	0,0844%
TOTAL CET1	8,9594%
AT1: minimum requirement Pillar 1	1,50%
TOTAL TIER 1	10,4594%
T2: minimum requirement Pillar 1	2,00%
TOTAL OWN FUNDS	12,4594%

In millions of euros	RWAs		Minimum capital req.
	31 December 2018	31 December 2017	31 December 2018
Credit risk (excluding CCR)	113.558	116.640	9.085
Of which the standardised approach	52.319	58.784	4.186
Of which the advanced IRB (AIRB) approach	58.542	55.836	4.683
Of which equity IRB under the simple risk-weighted approach or the IMA	2.697	2.020	216
Counterparty Credit risk (CCR)	2.186	1.800	175
Of which marked to market	324	224	26
Of which internal model method (IMM)	1.500	1.351	120
Of which risk exposure amount for contributions to the default fund of a CCP	58	64	5
Of which CVA	304	161	24
Securitisation exposures in the banking book (after the cap)	654	480	52
Of which IRB approach	603	414	48
Of which internal assessment approach (IAA)	52	66	4
Market risk	1.843	1.659	147
Of which the standardised approach	470	554	38
Of which IMA	1.373	1.106	110
Operational risk	12.821	11.471	1.026
Of which basic indicator approach	2.487	2.441	199
Of which standardised approach	1.547	1.455	124
Of which advanced measurement approach	8.787	7.575	703
Amounts below the thresholds for deduction (subject to 250% risk weight)	7.197	8.177	576
Amounts below the thresholds for deduction (subject to 250% risk weight)	7.197	8.177	576
TOTAL	138.259	140.227	11.061

3.c. Pillar 2 Process

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 BNP Paribas Fortis 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 acronym SREP (Supervisory Review and Evaluation Process).

The ICAAP (Internal Capital Adequacy Assessment Process) is the annual 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.

BNP Paribas Fortis' ICAAP is organized around two key principles: reviewing the adequacy of the capital level compared to its requirements, and capital planning.

Reviewing the adequacy of the capital relies on a twofold perspective:

- a regulatory perspective, as described in the CRD IV / CRR, by which all Pillar 1 risks are required to be covered by regulatory capital;
- an internal perspective, developed around a comprehensive review of the Pillar 1 risks specified in the Basel regulation as well as the Pillar 2 risks as defined in the Risk Appetite Statement retained by BNP Paribas Fortis and identified as material within the framework of the Risk Inventory System. From this perspective, Pillar 1 and Pillar 2 risks are assessed using internal quantitative approaches, completed, as necessary, by qualitative assessments and dedicated monitoring frameworks.

Capital planning is based on the most recent actual and estimated financial data available. These data are used to project future capital requirements, in particular by factoring in the Bank'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 BNP Paribas Fortis with projections of future capital consumption, and testing their robustness in a stressed macroeconomic environment.

The SREP and ICAAP definitions have been updated in the EBAs' "Guidelines on the revised common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing" published on 19 July 2018. These guidelines offer supervisors a common and detailed methodology that enables them to successfully complete the SREP according to a European standard. The revised guidelines replace the existing guidelines and are applicable from 1 January 2019.

The ECB has updated its "Guide to the internal capital adequacy assessment process (ICAAP)" on 9 November 2018 which defines the ECB expectations of the ICAAP around seven principles that will be considered in the assessment of each institution's ICAAP as part of the SREP. The guide will be applied from 1 January 2019 and replaces the expectations published in January 2016

4. CREDIT AND COUNTERPARTY CREDIT RISK

4.a. Credit risk

4.a.1. Exposure to Credit risk

The following table shows all BNP Paribas Fortis' financial assets, including fixed-income securities, which are exposed to credit risk. Credit risk exposure does not include collateral and other security taken by the Bank in its lending business or purchases of credit protection.

Exposure to credit risk by asset class

In millions of euros	31 December 2018			31 December 2017		
	IRBA	Standardised Approach	Total	IRBA	Standardised Approach	Total
Central governments and central banks	21,770	7,107	28,877	27,983	7,185	35,167
Corporates	106,197	24,988	131,185	102,211	29,543	131,754
Institutions (*)	16,820	8,115	24,935	19,546	11,410	30,956
Retail	82,628	33,046	115,675	79,835	32,640	112,476
Other non-credit-obligation assets (**)	409	14,895	15,304	381	13,198	13,579
Total Exposure	227,825	88,151	315,976	229,956	93,976	323,932

(*) 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.

4.a.2. General credit policy and control and provisioning procedures

BNP Paribas Fortis' lending activities are governed by the Global Credit Policy, which applies to all BNP Paribas Group entities. It is approved by the BNP Paribas Group Risk Committee, chaired by the Chief Executive Officer and endorsed by the BNP Paribas Fortis Executive Board, chaired by the Chief Executive Officer. The policy is underpinned by core principles relating to compliance with the Group's ethical standards, clear definition of responsibilities (Business and RISK), and the existence and implementation of procedures and requirements for a thorough analysis of risks. It is cascaded in the form of specific policies tailored to each type of business or counterparty. The framework for the governance of credit risks within the Bank is further detailed in a specific, transversal approach which is built upon key credit routing principles, rules governing the granting of delegations of authority and the role of the Central Credit Committee, which is the highest-level credit committee at the Bank. It also reiterates and reinforces the key principle that the RISK Function is independent from the Businesses.

4.a.3. The credit lifecycle

Decision-making procedures

The basis for effective credit risk management is the identification of both existing and potential credit risk inherent in any product or activity. This process includes the gathering of all relevant information concerning the products offered, the counterparties involved and all other elements that may influence credit risk. In particular, before making any commitments, BNP Paribas Fortis carries out an in-depth review of any known development plans of the client and ensures that the Bank has thorough knowledge of all the structural aspects of the client's operations and that adequate monitoring will be feasible.

Assessing the credit risk of a proposed transaction consists of:

- analysis of the probability that the client will fail to meet his obligations, which also translates into a risk classification on the Bank's rating scale ;

- analysis of the possibilities of fulfilling the client's obligations by other means in the event that the client fails to meet his obligations himself ;
- formulation of a credit proposal which brings all these facets to the attention of the decision makers.

Authorised persons or committees composed of designated Business and RISK representatives take a joint decision based on the credit proposal. Credit proposals must comply with the Bank's Global Credit Policy and with any specific policies, and must in all cases comply with the applicable laws and regulations.

A system of discretionary lending limits has been established, under which all lending decisions must be approved by formally designated members of the Business and the RISK department. The underlying principle is the need to achieve an appropriate balance, in terms of overall profitability, between two opposite drivers, i.e. maximising the decision-making autonomy of the businesses on the one hand and reducing unexpected credit and counterparty risk on the other.

Approvals are systematically given in writing, either by means of a signed approval form or in the minutes of formal meetings of a Credit Committee. 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. In addition, an industry expert or designated specialist may also be required to sign off on the loan application for certain sectors or industries. In Retail banking, simplified procedures are applied, based on statistical decision-making aids, for standard products and limited amounts.

Monitoring procedures

All BNP Paribas Fortis entities are subject to comprehensive risk monitoring and reporting. This is carried out by Control and Reporting 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. Exception reports are produced (at varying intervals depending on the business) and various tools are used to provide early warnings of potential escalations of credit risks. Monitoring is carried out at different levels, generally reflecting the organisation of discretionary lending limits. The monitoring teams report to the RISK department. Monitoring teams are closely involved in the organisation of the Watchlist and Impairment Committees which meet at quarterly intervals to examine all higher risk, sensitive or problem loans in excess of a certain amount. Its responsibilities include guidance on strategy and giving its opinion on any adjustments to impairment provisions, based on the recommendations of the relevant Business and the RISK department.

Impairment procedures

The BNP Paribas Fortis provisioning process is aligned with the BNP Paribas Group process and is organised on a monthly basis. The provisioning process encompasses one or more decisional levels and the routing depends on the concerned Business, its Delegation Framework and the amount of the change in provision. The provision for impairment is determined in accordance with applicable accounting standards. The amount of the impairment loss is based on the present value of probable net recoveries, taking into account the possible realisation of collateral received.

In addition, a stage 1 & 2 impairment figure is established for each Business on a statistical basis. The BNP Paribas Fortis Committee on Impairments and Provisions meets on a quarterly basis to approve the amount of the impairment. This is based on simulations of losses to maturity on portfolios of loans whose credit quality is considered to have weakened, but where the customers concerned have not been identified as in default (i.e. loans not covered by stage 3 impairment). The simulations carried out by the RISK department use the parameters of the internal rating system described below.

The aforementioned Committee takes the final decision on all aspects of cost of risk, including stage 3 provisions for individual impairment and stage 1 & 2 impairments. Decisions on the structured credits portfolio are taken by the same Committee.

4.a.4. Internal rating system

BNP Paribas Fortis has chosen to adopt the most advanced approach – the 'Advanced Internal Ratings Based Approach' (AIRBA) as described in the Basel II accord – and received approval from the CBFA on 3 March 2008 for using this approach to calculate capital requirements under Basel II (now Basel III).

The Bank has a comprehensive internal rating system for determining risk-weighted assets used to compute capital adequacy ratios. A periodic assessment and control process has been deployed to ensure that the system is appropriate and correctly implemented. For corporate loans, the system is based on three parameters: the counterparty's probability of default expressed via a rating; loss given default, which depends on the structure of the transaction; and the credit conversion factor (CCF), which estimates the portion of off-balance sheet exposure at risk.

There are twenty counterparty ratings. Seventeen cover performing clients with credit assessments ranging from 'excellent' to 'very concerning', and three relate to clients classified as in default, as per the definition published by the banking supervisor.

Ratings are determined at least once a year, in connection with the annual review of the client's total exposure, drawing on the combined expertise of Business Line staff and Senior Credit Officers from the RISK department, the latter having the final say. High quality tools have been developed to support the rating process, including analysis assistance and credit scoring systems. The decision to use these tools and the choice of technique depends on the nature of the risk.

Various quantitative and other methods are used to check rating consistency and the robustness of the rating system. Loans to private customers and very small businesses are rated using statistical analyses of groups of risks with the same characteristics. The RISK department has overall responsibility for the quality of the entire system. This responsibility is fulfilled either by directly designing the system, validating it and/or verifying its performance.

'Loss given default' is determined either using statistical models for books with the highest degree of granularity or using expert judgment based on comparative values. Basel III defines 'loss given default' as the loss that the Bank would suffer in the event of the counterparty's default.

For each transaction, it is measured using the recovery rate for a senior unsecured exposure to the counterparty concerned, adjusted for the effects of any risk mitigation techniques (collateral and other security). Amounts recoverable against collateral and other security are estimated each year on a prudent basis and discounts are applied for realising the security in a period of economic slowdown.

Exposure at default has been modelled by the Bank, when the regulation allows it. Conversion factors are used to measure the off-balance sheet exposure at risk in the event of borrower default.

Each of the three credit risk parameters is back-tested annually to check the system's performance for each of the Bank's business segments. Back-testing consists of comparing estimated and actual results for each parameter.

For back-testing ratings, the default rate of populations in each rating category, or each group of risks with similar characteristics for Retail banking operations, is compared with the actual default rate observed on a year-by-year basis. An analysis by rating policy, rating, rating method, etc. is carried out to identify any areas where the models might be underperforming. The stability of the rating and its population is also verified. The Bank has also developed back-testing techniques tailored to low-default portfolios to assess the appropriateness of the system, even where the number of actual defaults is very low.

Back-testing of the "Loss given default" is based mainly on analysing recovery flows on exposures in default. When an exposure has been written off, each amount recovered is discounted back to the default date and calculated as a percentage of the exposure. When an exposure has not yet been written off, an estimation is made of the amount that will still be recovered. The "Loss given default" determined in this way is then compared with the initial forecast. As with the rating, "Loss given default" is analysed on an overall basis and by rating policy. Variances on an item-by-item and average basis are analysed taking into account the bimodal distribution of recovery rates. The results of these tests show that the Bank's estimates are consistent with economic downturn conditions and are conservative on an average basis.

The credit conversion factor is also back-tested annually.

The result of all back-testing work is presented annually to the bodies responsible for overseeing the rating system and risk practitioners. These results and ensuing discussions are used to help setting priorities in terms of developing methodology and deploying tools.

Internal estimates of risk parameters are used in the Bank's day-to-day management in line with Basel III recommendations. For example, apart from calculating capital requirements, they are used when making new loans or reviewing existing loans to measure profitability, determine stage 1 & 2 impairment, monitor and ensure active risk management, and for internal and external reporting.

4.a.5. Portfolio policy

In addition to carefully selecting and assessing individual risks, BNP Paribas Fortis follows a portfolio-based approach to diversify risks among borrowers, industries and countries. As part of this policy, BNP Paribas Fortis may use credit risk transfer instruments (such as securitisation programmes or credit derivatives) to hedge individual risks, reduce portfolio concentration or cap potential losses under crisis scenarios.

4.a.6. Risk mitigation techniques

Collateral and other security

Risk mitigation is the result of reducing the credit risk by hedging or by obtaining collateral. Hedging is any financial technique designed to reduce or eliminate the financial risk engendered by products and/or activities. Security (collateral) is any commitment made or privilege given by a counterparty or third party to which the Bank can seek recourse in the event of the counterparty's default in order to reduce loan losses, or any other agreement or arrangement having a similar effect. The lending activity is never based purely on collateral or hedging. Risk mitigation factors are always regarded as an alternative solution.

The BNP Paribas Global Credit Policy, which also applies to BNP Paribas Fortis, sets out how transactions should be structured in order to mitigate risk. Cash generated by operations is regarded as the primary source of the borrower's ability to repay. Guarantors are subject to the same rigorous upfront assessment process as primary debtors. Collateral and other security are taken into account at fair value, and are only accepted as the main source of repayment in exceptional cases such as for example commodities financing.

Banking regulations set clear guidelines for assessing the risk-mitigating effect of collateral and other security under the Basel III advanced approaches. The Bank's diversified business base means that loans are secured by many different types of collateral and security charges over inventory, accounts receivable or real estate. Risk assessments also take into account direct guarantees issued by the counterparty's parent company or other guarantors such as financial institutions. Other guarantees assessed by the Bank include credit derivatives, export credit agencies and credit enhancers. Acceptance of these types of guarantees is governed by strict criteria. A guarantee is considered as mitigating a risk only when the guarantor is rated higher than the counterparty. The value of collateral or other security is only taken into account in measuring exposure if there is no strong correlation with the risk on the first-rank debtor.

Advanced IRB approach

The following table gives the breakdown by asset class - Sovereign, Corporates, Institutions and Retail - of the risk mitigation resulting from collateral and guarantees relating to the portfolio of loans and credit commitments for all Business Lines using the advanced IRB Approach.

	31 December 2018				31 December 2017			
	Total exposure	Risk mitigation			Total exposure	Risk mitigation		
		Guarantees and credit derivatives	Collateral	Total guarantees and collaterals		Guarantees and credit derivatives	Collateral	Total guarantees and collaterals
<i>In millions of euros</i>								
Central governments and central banks	21,770	1,166	2	1,167	27,983	1,132	1	1,132
Corporates	106,197	15,974	11,075	27,049	102,211	20,112	6,826	26,938
Institutions	16,820	2,564	433	2,997	19,546	2,429	98	2,527
Retail	82,628	2,433	44,322	46,755	79,835	2,755	42,918	45,673
Total	227,415	22,136	55,832	77,968	229,575	26,428	49,842	76,270

Standardised approach

The following table gives the breakdown by asset class - Sovereign, Corporates, Institutions and Retail - of the risk mitigation resulting from collateral and guarantees relating to the portfolio of loans and credit commitments for all Business Lines using the standardised approach.

In millions of euros	31 December 2018				31 December 2017			
	Total exposure*	Risk mitigation			Total exposure*	Risk mitigation		
		Guarantees and credit derivatives	Collateral	Total guarantees and collaterals		Guarantees and credit derivatives	Collateral	Total guarantees and collaterals
Central governments and central banks	7.107	-	1	1	7.185	-	-	-
Corporates	24.988	2.299	411	2.710	29.543	1.373	459	1.832
Institutions	8.115	31	4	35	11.410	-	1	1
Retail	33.046	1.220	3.479	4.699	32.640	295	3.940	4.235
Total	73.256	3.550	3.895	7.445	80.778	1.668	4.400	6.068

Purchases of credit protection

Optimisation of credit portfolio management may require the use of efficient hedging techniques to avoid concentration or unwanted exposure in the loan or debt security portfolio. For this purpose, BNP Paribas Fortis uses mainly single name credit default swaps (CDS). CDS counterparties are carefully selected and virtually all contracts benefit from collateral agreements.

Asset securitisation

Asset securitisation is the process of creating a marketable financial instrument that is backed by the cash flow or value of specific financial assets. During the securitisation process, assets (e.g. consumer loans, receivables, mortgages) are selected and pooled together into a special purpose vehicle (SPV) which issues securities that can be sold to investors.

Diversification of exposure to credit risk

Credit risk concentration is any exposure to a counterparty or an aggregate of exposures to a number of positively correlated counterparties (i.e. tendency to default under similar circumstances) with the potential to produce a significant amount of capital loss due to a bankruptcy or failure to pay. Avoidance of concentrations is therefore fundamental to BNP Paribas Fortis' credit risk strategy of maintaining granular, liquid and diversified portfolios.

In order to identify potential linkages between exposures to single counterparties, BNP Paribas Fortis applies the concept of 'Total Group Authorisation'. This implies that groups of connected counterparties are deemed to be a 'Business Group' for the management of credit risk exposure.

To manage the diversity of credit risk, BNP Paribas Fortis' credit risk management policy seeks to spread credit risk across different sectors and countries. The table below shows the industry concentration of BNP Paribas Fortis' customer credit portfolio at 31 December 2018.

Breakdown of credit risk by Asset Class and by corporate industry

In millions of euros	31 December 2018		31 December 2017	
	Exposure	%	Exposure	%
Agriculture, Food, Tobacco	12.982	4%	13.586	4%
Financial services	39.387	12%	44.581	14%
Chemicals excluding Pharmaceuticals	3.777	1%	3.268	1%
Building & Public Works	9.821	3%	9.174	3%
Retailers	7.393	2%	6.826	2%
Energy excl. Electricity	1.995	1%	1.641	1%
Equipment excluding IT	6.495	2%	7.169	2%
Real estate	22.590	7%	21.995	7%
Information Technologies	1.756	1%	1.539	0%
Metals & Mining	5.421	2%	4.642	1%
Wholesale & Trading	15.307	5%	16.630	5%
Business Services	27.924	9%	29.866	9%
Communications Services	3.455	1%	3.501	1%
Transportation & Logistics	9.618	3%	8.778	3%
Utilities (Electricity, Gas, Water, etc.)	9.105	3%	9.779	3%
Retail	96.330	30%	91.123	28%
Sovereign & public sector	23.292	7%	29.529	9%
Other	19.326	6%	20.304	6%
Total Exposure	315.976		323.932	

(*) Credit risk exposure excludes DTA's risk weighted at 250%, default fund contributions to CCPs and securitisation positions.

Country concentration risk is the sum of all exposures to obligors in the country concerned. The table below shows the geographical concentration of BNP Paribas Fortis' customer credit portfolio at 31 December 2018.

Geographical breakdown of credit risk at 31 December 2018 by counterparty's country of location

In millions of euros	31 December 2018						%
	Central governments and central banks	Corporates	Institutions	Retail	Other non-credit-obligation assets	TOTAL	
Europe	23.822	113.697	22.645	105.764	14.463	280.391	89%
Belgium	12.947	63.749	8.694	78.346	2.725	166.462	53%
Netherlands	683	3.770	578	1.622	425	7.079	2%
Luxembourg	4.179	10.661	237	7.211	719	23.007	7%
France	1.608	6.002	11.069	5.024	3.549	27.253	9%
Other European countries	4.404	29.515	2.066	13.561	7.044	56.590	18%
North America	170	3.872	398	52	1	4.493	1%
Asia & Pacific	209	726	286	75	18	1.313	0%
Rest of the World	4.677	12.889	1.607	9.783	822	29.778	9%
Total Exposure	28.877	131.185	24.935	115.675	15.304	315.976	100%

(*) Credit risk exposure excludes DTA's on temporary differences subject to risk weighting, default fund contributions to CCPs and securitisation positions.

In millions of euros	31 December 2017						
	Central governments and central banks	Corporates	Institutions	Retail	Other non-credit-obligation assets	TOTAL	%
Europe	29.898	113.674	28.961	99.108	12.824	284.465	88%
Belgium	17.404	60.139	12.093	76.548	2.624	168.808	52%
Netherlands	561	4.080	678	672	353	6.344	2%
Luxembourg	4.976	10.761	205	6.233	703	22.878	7%
France	1.388	5.914	14.222	4.282	3.208	29.014	9%
Other European countries	5.569	32.780	1.762	11.374	5.936	57.421	18%
North America	276	3.283	262	28	1	3.850	1%
Asia & Pacific	180	521	237	71	-	1.010	0%
Rest of the World	4.813	14.277	1.496	13.268	753	34.607	11%
Total Exposure	35.167	131.754	30.956	112.476	13.579	323.932	100%

(*) Credit risk exposure excludes DTA's on temporary differences subject to risk weighting, default fund contributions to CCPs and securitisation positions.

4.a.7. Credit risk rating

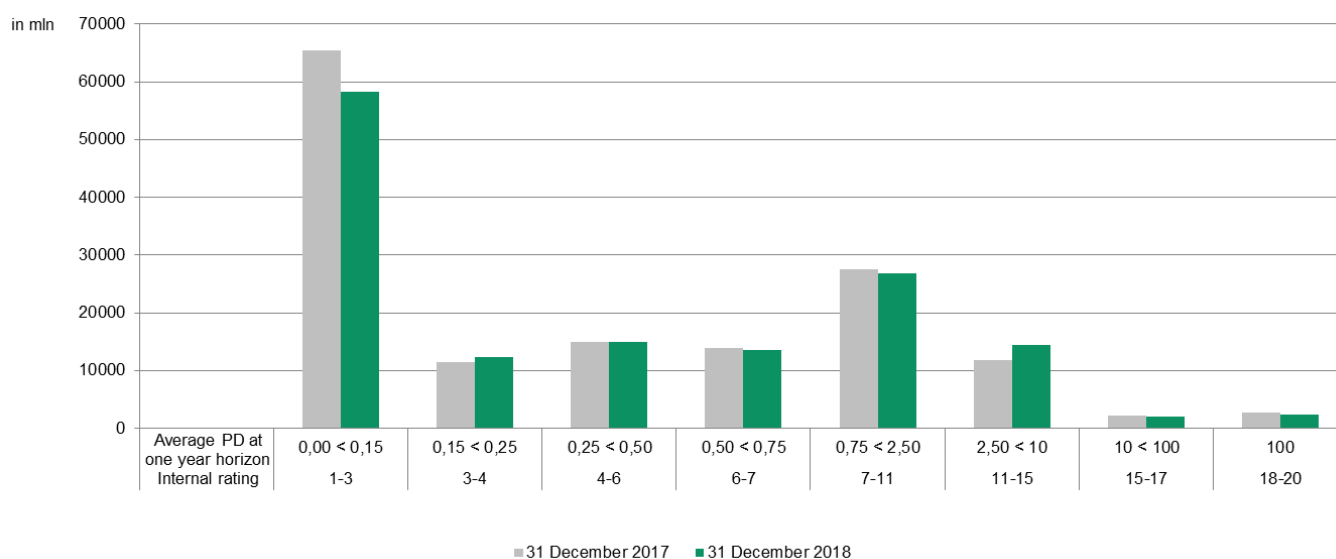
Credit risk rating is a classification that results from the Risk Rating Assignment Process, which is based on a qualified assessment and formal evaluation. This classification is the result of an analysis of each obligor's financial history and an estimate of its ability to meet debt obligations in the future.

To that end, BNP Paribas Fortis has drawn up a 'Master Scale', ranging from 1 to 20, which provides an indication of the probability that a counterparty will default within one year. Master Scale ratings from 1 to 6 are considered investment grade, from 7 to 17 non-investment grade and from 18 to 20 impaired.

IRBA: Sovereign, Financial Institutions and Corporate exposures by credit rating

The chart below shows a breakdown by credit rating of loans and commitments towards Sovereigns, Institutions and Corporates for the entire Bank's Business Lines, measured using the internal ratings-based approach (IRBA). This exposure represents EUR 144.8 billion of the gross credit risk at 31 December 2018, compared with EUR 149.7 billion at 31 December 2017.

Breakdown of IRBA exposure by internal rating – Sovereign, Institutions and Corporate



The downward evolution in credit risk exposure for the internal ratings 1-3 was mainly driven by lower investments in government bonds and a decreased exposure towards BNP Paribas Group.

Retail banking operations

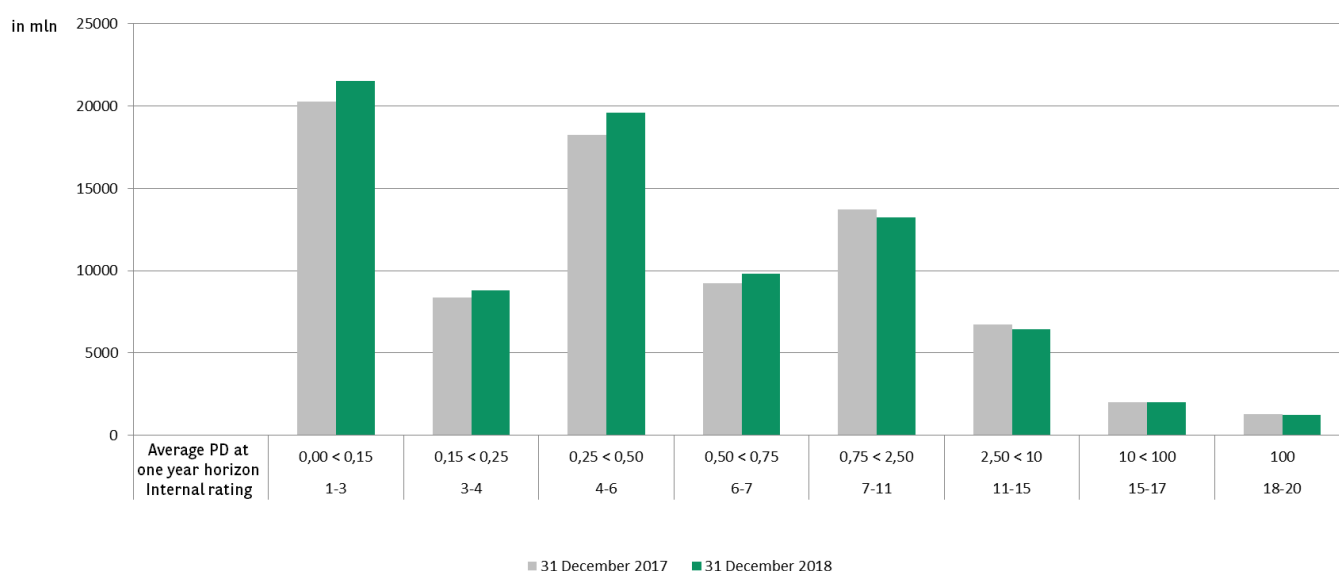
Retail banking operations are carried out through the BNP Paribas Fortis retail network. The Belgian field of operations is embedded in structured and automated credit processes, complying with the Basel III Internal Rating Based Advanced approach.

All the advanced Basel III parameter estimates (PD, EAD, LGD) are reviewed and/or updated yearly. The explanatory variables for the Retail part of the portfolio mainly rely on internal behavioural data. These parameters are computed monthly on the basis of the latest available information and made available without any manual intervention.

Classical scoring techniques are used for screening customers at application time, always remaining in line with the Basel III parameters.

The chart below shows a breakdown by credit rating of loans and commitments in the Retail loan book for the entire Bank's Business Lines, measured using the internal ratings-based approach. This exposure represents EUR 82.6 billion at 31 December 2018, compared with EUR 79.8 billion at 31 December 2017.

Breakdown of IRBA - individually rated - Retail activities



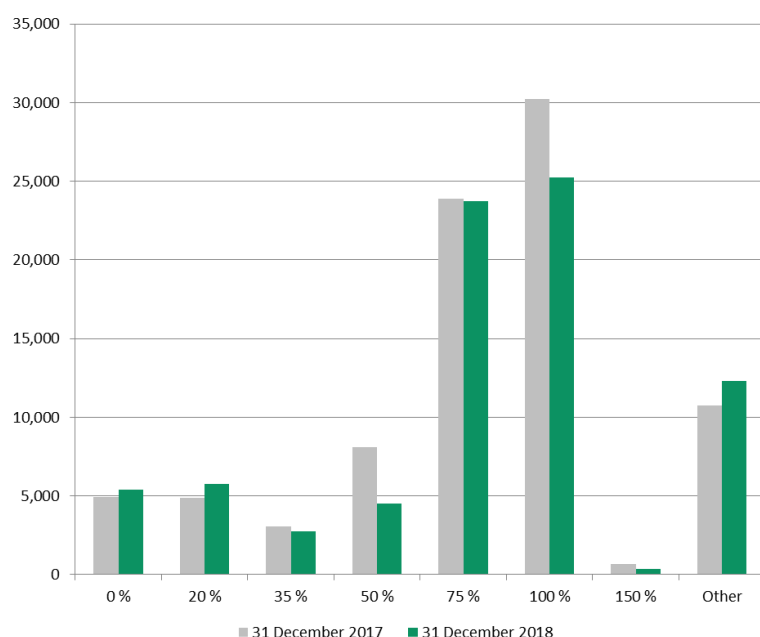
Standardised approach

BNP Paribas Fortis also applies the standardised approach or the 'Unrated Standardised Approach' (USTA) to legal entities or business units, inter alia those that are classified under 'Permanent exemptions'.

The entities classified under 'Permanent exemptions' are those legal entities or business units that are earmarked as non-material based on the eligibility criteria or processes defined by BNP Paribas Fortis. Permanent exemptions will remain as long as the eligibility criteria or processes for non-materiality continue to be met.

The chart below provides information on the exposure to the loan book measured using the standardised approach and broken down by risk weights.

Breakdown of exposure by weighting via the standardised approach



4.a.8. Loans with forbearance measures

When a borrower is bordering on or in financial difficulties, they may receive a concession from the bank that would otherwise not have been granted had the borrower not met 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 probationary period, for at least two years. The concept of restructuring is described in the accounting principles (note 1.f.4 to the consolidated financial statements) in the Annual Report 2018.

The identification of restructured exposures and the removal of the "restructured" status are embedded in the credit decision process and performed at the appropriate delegation level. A system has been set up in order to identify automatically exposures that qualify for the removal of the "restructured" status so that these exposures can be submitted for decision.

Information on restructured loans is reported to the supervisory authority on a quarterly basis.

The tables that follow show the gross value and impairment amounts of doubtful loans that have been restructured, as well as restructured loans subsequently reclassified as non-doubtful loans.

Restructured loans by asset class

	Restructured loans at 31 December 2018					
	Gross amount	Provision	Net amount	Of which doubtful outstandings		
				Gross amount	Provision	Net amount
<i>In millions of euros</i>						
Loans and advances	1.139	(313)	826	525	(258)	267
Central governments and central banks	-	-	-	-	-	-
Corporates	978	(277)	701	452	(230)	222
Retail	161	(36)	125	73	(28)	45
Off - balance sheet commitments	37	(1)	36	28	(1)	27
Total restructured loans	1.176	(314)	862	553	(259)	294

In millions of euros	Restructured loans at 31 December 2017					
	Gross amount	Provision	Net amount	Of which doubtful outstandings		
				Gross amount	Provision	Net amount
Loans and advances	1.262	(289)	973	650	(226)	423
Central governments and central banks	32	(0)	32	0	(0)	-
Corporates	746	(239)	506	402	(192)	210
Retail	484	(49)	435	247	(34)	214
Off - balance sheet commitments	9	(0)	9	5	(0)	5
Total restructured loans	1.271	(289)	982	655	(226)	429

Restructured loans by geographical region

In millions of euros	Restructured loans at 31 December 2018					
	Gross amount	Provision	Net amount	Of which doubtful outstandings		
				Gross amount	Provision	Net amount
Europe	756	(199)	557	456	(187)	269
Belgium	341	(12)	229	262	(111)	151
Luxembourg	72	(19)	53	62	(18)	44
France	45	(12)	33	22	(11)	11
United-Kingdom	72	(24)	47	46	(23)	23
Germany	14	(2)	12	8	(2)	6
Other European countries	212	(30)	181	55	(22)	33
North America	36	(22)	14	21	(21)	0
Rest of the world	384	(93)	291	76	(51)	25
Turkey	314	(49)	265	9	(7)	2
Other countries	70	(45)	26	67	(44)	24
Total restructured loans	1,176	(314)	862	553	(259)	294

In millions of euros	Restructured loans at 31 December 2017					
	Gross amount	Provision	Net amount	Of which doubtful outstandings		
				Gross amount	Provision	Net amount
Europe	918	(187)	731	580	(166)	413
Belgium	290	(105)	185	227	(104)	122
Luxembourg	73	(15)	58	51	(15)	36
France	45	(6)	38	19	(6)	13
United-Kingdom	3	(0)	2	1	(0)	0
Germany	316	(14)	302	170	(2)	168
Other European countries	192	(46)	146	113	(40)	73
North America	23	(23)	-	23	(23)	-
Rest of the world	329	(78)	251	52	(37)	16
Turkey	287	(50)	237	14	(9)	4
Other countries	42	(28)	14	38	(27)	12
Total restructured loans	1,271	(289)	982	655	(226)	429

4.b. Counterparty credit risk

Counterparty credit risk (CCR) is the translation of the credit risk embedded in the financial transactions, investments and/or settlement between counterparties. The transactions encompass bilateral contracts - i.e. over-the-counter (OTC) - and cleared contracts through a clearing house. The amount at risk changes over the contract's lifetime together with the risk factors that impact the potential future value of the transactions.

Counterparty credit risk lies in the fact that a counterparty may default on its obligations to pay the Bank the full present value of a transaction or portfolio for which the Bank is a net receiver. Counterparty credit risk is linked to the

replacement cost of a derivative or portfolio in the event of the counterparty default. Hence, it can be seen as a market risk in case of default or a contingent risk.

For the measurement of counterparty credit risk, the activities of the RISK function are organised around 5 main axes:

- the valuation of the counterparty credit risk exposures;
- the monitoring and analysis of these exposures and the associated limits;
- the implementation of risk reducing mechanisms;
- the calculation and the management of credit value adjustments (CVA);
- the definition and implementation of stress tests.

4.b.1. Counterparty credit risk valuation

Counterparty exposure calculation

The exposure to counterparty credit risk is measured using two approaches:

1. Modelled exposure – Internal model approach

With regard to modelled exposure to counterparty credit risk, the exposure at default (EAD) for counterparty credit risk is calculated based on the Effective Expected Positive Exposure (EEPE) indicator which is multiplied with the regulatory factor alpha as defined in article 284-4 of EU regulation n° 575/2013. The 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 commodities and equity prices, interest rates and foreign exchange rates, affecting the counterparty 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.

Transactions may be hedged by a Master Agreement, which can include Credit Support Annexe(s) (CSA). For each counterparty, the model aggregates the exposures taking into consideration any potential master 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 (MaxPFE) is used to monitor maximum limits.

The internal model for counterparty credit risk has been updated to comply with the EU regulation n° 575/2013 effective from 1 January 2014:

- Extension of the margin periods of risk;
- Inclusion of the specific correlation risk;

- Determination of a stressed Effective EPE calculated based on a calibration reflecting a particular period of stress.

2. *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 conform the requirements of article 274 of EU regulation n° 575/2013: in function of the type of transaction and the residual maturity.

Limit / Monitoring Framework

Limits reflecting the risk appetite (as expressed in the Risk Appetite Statement) of the bank are defined for the counterparty credit risk. For each counterparty, the highest exposure value of the PFE profile (MAX PFE) calculated by the system is compared on a daily basis to the counterparty limit to ensure compliance with the credit decisions.

Limits are defined and calibrated as part of the risk approval process. They are approved in committees with different levels of authority, the highest authority level being the 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, BNP Paribas Fortis implemented two counterparty credit risk mitigation mechanisms:

- Netting agreements in the case of OTC transactions
- Clearing through central counterparties, in the case of OTC or listed derivatives transactions

1. *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 trade-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 case of currency settlements. This corresponds to the netting of all payments and receipts between the Bank and a counterparty in the same currency, to be settled 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 agreement are those issued by the National Bank of Belgium (NBB), and on an international basis by the International Swaps and Derivatives Association (ISDA).

2. *Trade clearing through central counterparties*

Trade clearing is part of BNP Paribas Fortis' usual Capital Market activities. As a clearing member, BNP Paribas Fortis contributes to the risk management framework of the central clearing counterparties (CCPs) through the payment of a default fund contribution as well as daily margin calls. The rules which define the relationships between BNP Paribas Fortis and the CCPs of which it is a member are described in each CCP's rule book.

This scheme enables the reduction of notional amounts through the netting of the portfolio and a transfer of the risk from several counterparties to a single one with a robust risk management framework.

Bilateral Initial Margining

EU regulation n° 648/2012 imposes additional requirements for derivatives markets participants including the obligation to exchange collateral for non-centrally cleared (OTC) contracts. For these transactions, a bilateral initial margin must be posted by financial counterparties and the important non-financial counterparties as defined in the regulation. This margin serves to mitigate the counterparty credit risk related to OTC derivatives that are not cleared

through a central clearing counterparty. Transactions with sovereigns, central banks and supranational counterparties are excluded from this framework.

In case of default of the counterparty, the Bank closes out all transactions at market value. The bilateral initial margin aims to cover the variations in market value during the period of liquidation and reflects an extreme but plausible estimation of an increase in value of the corresponding financial instruments with a confidence interval of 99% over a period of 10 days and based on historical data including a period of significant stressed market conditions.

The bilateral initial margin is exchanged between the Bank and the counterparty without netting. It is held by a third party to guarantee that (i) the Bank can immediately activate the bilateral initial margin posted by the counterparty in case of default of the counterparty and (ii) the bilateral initial margin posted by the Bank is protected in case of default of the counterparty.

Credit Value Adjustments (CVA)

The valuation of financial OTC trades carried out by BNP Paribas Fortis as part of its trading activities includes credit value adjustments (CVAs). CVA is an adjustment of the trading portfolio valuation to take into account the counterparty credit risk. CVA is the fair value of any expected loss arising from counterparty exposure based on the potential positive value of the portfolio, the counterparty default probability and the estimated recovery rate at default.

The credit value 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 Fortis can use a dynamic hedging strategy, involving the purchase of market instruments such as credit derivative instruments.

CVA volatility risk (risk on CVA)

To protect banks against the risk of losses due to CVA variations, EU regulation n° 575/2013 introduced a dedicated capital charge on the VaR on CVA. This charge aims at capitalising the risk of loss caused by changes in the credit spread of a counterparty to which BNP Paribas Fortis is exposed and is calculated primarily applying an internal model approach which is based on the market risk internal model.

Stress tests and unfavourable correlation risk

The BNP Paribas Fortis counterparty credit risk stress testing framework is aligned with the market risk framework (see section 5.b 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 credit risk such as deteriorations in counterparty credit quality and shocks or the volatility used in the counterparty credit risk forward simulation pricing engine.

Such risk analysis is present within the 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 into two parts:

- General Wrong Way Risk (GWWR), which corresponds to the risk that the likelihood of default by counterparties 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 counterparty's probability of default due to the collateral provided as part of the transactions with the counterparty.

GWWR is identified using stress tests. In addition, when a legal link between the exposures underlying and the counterparty is established, the SWWR is subject to prescribed regulatory capital treatment.

As per the stress testing framework and policy, the General Wrong Way Risk (GWWR) monitoring and analysis approach combines top-down and bottom-up aspects:

- 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, the industries in which they are involved and stressing market and macro-economic parameters appropriately. Derivatives, securities financing transactions and Collateral positions that counterparties have with BNP Paribas Fortis 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 needed to define more specifically the most impacting scenarios at portfolio level (the approach consists of the use of stressed market parameters reflecting extreme but realistic conditions).

Specific Wrong Way Risk exposures are subject to a specific capital calculation as defined in EU regulation 575/2013.

4.b.2. Exposure to Counterparty credit risk

The table below shows the exposure to counterparty credit risk (measured as exposure at the time of default) by asset class on derivative contracts and securities lending/borrowing transactions, after the impact of any netting agreements.

Counterparty credit risk exposure at default by asset class (excl. CVA charges)

In millions of euros	31 December 2018			31 December 2017		
	IRBA**	Standardised Approach	Total	IRBA**	Standardised Approach	Total
Bilateral counterparty credit risk	11.317	643	11.959	8.682	331	9.014
Central governments and central banks	639	0	639	2.580	0	2.580
Corporates	4.266	111	4.377	4.366	88	4.455
Institutions (*)	6.411	526	6.938	1.736	237	1.973
Retail	0	5	5	0	6	7
Exposure to CCP related to clearing activities	31	241	273	25	1.105	1.130
Total Exposure	11.348	884	12.232	8.707	1.437	10.144

(*) 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.

(**) Under the IRBA approach exposure computed by the Internal Model are since 2014 based on the stressed EAD.

For counterparty credit risk, the share of exposures under the IRB approach represents 93% at 31 December 2018, compared with 86% at 31 December 2017.

The table here below presents the counterparty credit risk exposures by product type and split by bilateral transactions between the Bank and its clients and cleared transactions through central clearing houses.

Counterparty credit risk exposure at default by product

In millions of euros	31 December 2018					31 December 2017				
	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	6.580	99%	55	1%	6.635	6.191	98%	158	2%	6.349
Securities financing transactions	5.379	98%	108	2%	5.487	2.823	76%	870	24%	3.693
Listed derivatives			31	100%	31			25	100%	25
Default fund contributions to CCP's			79	100%	79			78	100%	78
TOTAL	11.959	98%	273	2%	12.232	9.014	89%	1.130	11%	10.144

4.b.3. Bilateral counterparty credit risk

Bilateral counterparty credit risk originates from transactions that have been traded bilaterally (i.e. non cleared) between BNP Paribas Fortis and its counterparties.

The exposure at default (EAD) for bilateral counterparty credit risk is primarily measured with the aid of the internal models. For the perimeter not covered by internal models (mainly the subsidiary TEB), EAD is calculated using the mark-to-market method (Net Present Value + Add-On).

The bilateral counterparty credit risk risk-weighted assets are calculated by multiplying the exposure by a risk weight resulting from the approach applied (standard approach or internal rating based approach (IRBA)).

The table below shows a summary by approach of all regulatory exposures of counterparty credit risk and their associated risk weighted assets for all bilateral activities covering the full BNP Paribas Fortis perimeter.

Bilateral counterparty credit risk exposures by exposure valuation method (excluding CVA risk)

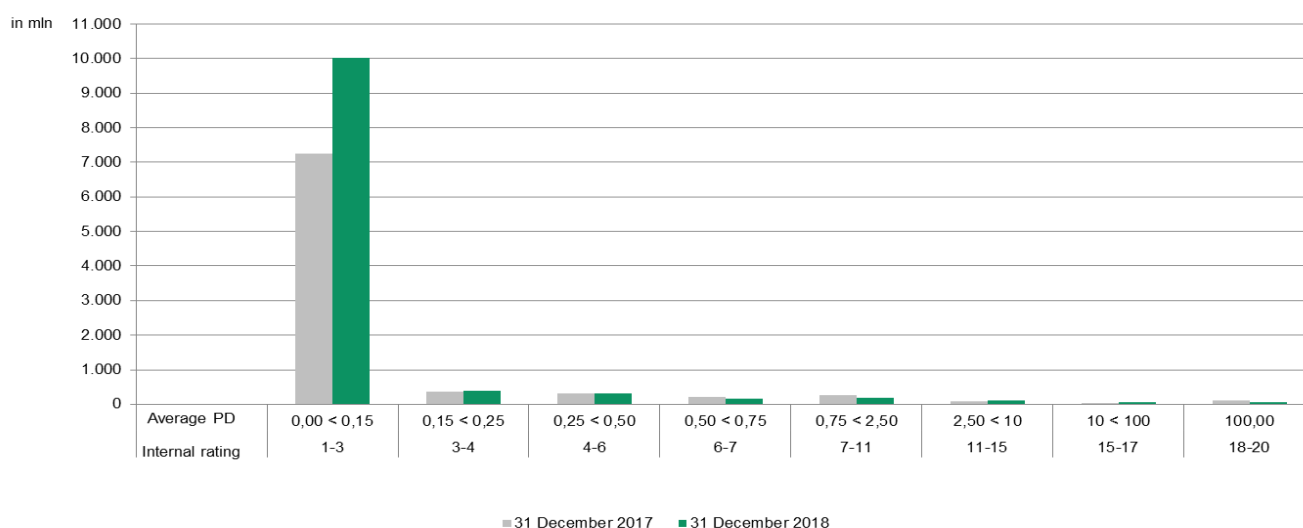
In millions of euros	31 December 2018					
	EEPE*	Multiplier	EAD post CRM	RWA	RWA - Standardized approach	RWA - IRBA Approach
Mark-to-market method	0	0	1.257	320	227	94
Internal model approach	6.689	1,6	10.702	1.500	0	1.500
o/w Securities Financing Transactions	3.169	1,6	5.071	188	0	188
o/w derivatives and long settlement transactions	3.519	1,6	5.631	1.312	0	1.312
Total				1.821	227	1.594

(*) Effective Expected Positive Exposure

In millions of euros	31 December 2017					
	EEPE*	Multiplier	EAD post CRM	RWA	RWA - Standardized approach	RWA - IRBA Approach
Mark-to-market method	0	0	730	204	146	58
Internal model approach	5.177	1,6	8.284	1.351	0	1.351
o/w Securities Financing Transactions	1.574	1,6	2.518	16	0	16
o/w derivatives and long settlement transactions	3.604	1,6	5.766	1.335	0	1.335
Total				1.555	146	1.409

(*) Effective Expected Positive Exposure

Bilateral counterparty credit risk exposure under the IRBA approach



The table below presents the distribution of the EAD of the bilateral derivatives portfolio by rating. For each rating it gives the part of netted transactions.

Bilateral derivatives portfolio by rating:

	31 December 2018		31 December 2017	
	Distribution of EAD	of which netted transactions	Distribution of EAD	of which netted transactions
AAA	0%	100%	0%	99%
AA	55%	96%	38%	94%
A	4%	98%	8%	98%
BBB	36%	99%	45%	99%
BB	4%	94%	6%	95%
B	1%	92%	1%	86%
Others	1%	97%	2%	99%

The bilateral derivatives portfolio exposure was for 6% collateralised in 2018.

4.b.4. Counterparty credit risk exposures on central counterparties for cleared transactions

The EU regulation n° 648/2012 distinguishes between eligible and non-eligible central counterparties. On 29 December 2018, BNP Paribas Fortis was only exposed to eligible central counterparties.

The counterparty credit risk capital charge on eligible central counterparties for cleared transactions is the result of an extension of the bilateral CCR perimeter to clearing activities; it covers the cleared part of the OTC derivatives and repos 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 the clearing activities (only for own account);
- a charge resulting from non-segregated initial margins posted at the CCP ;
- a charge resulting from the contributions to the default fund of the CCP.

In case of absence or inconsistency of certain parameters, the regulation provides a so-called "alternative" method.

The composition of the CCP own funds by method and by type of capital requirement is presented in the table here below.

Exposure on central counterparties for cleared transactions:

In millions of euros	31 December 2018		31 December 2017	
	EAD post CRM	RWAs	EAD post CRM	RWAs
Exposures to QCCPs* (total)		61		85
Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	61	1	51	1
(i) OTC derivatives	59	1	15	0
(ii) Exchange-traded derivatives	0	0	0	0
(iii) SFTs	2	0	36	1
(iv) Netting sets where cross-product netting has been approved	0	0	0	0
Segregated initial margin	0		0	
Non-segregated initial margin	133	2	1.002	20
Prefunded default fund contributions	79	58	78	64
Alternative calculation of own funds requirements for exposures		0		0
Exposures to non-QCCPs (total)		0		0

(*) Qualifying Central Counterparties

4.b.5. CVA risk

The CVA risk measures the risk of loss which originates from the volatility of the CVA following movements in the credit spreads linked to the counterparties to which the Bank is exposed (see paragraph credit value adjustment (CVA)).

Under the standardised approach, the capital requirement for credit valuation adjustment risk (CVA) is calculated according to the Supervisory Formula Approach.

Under the advanced 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.

CVA risk exposure and risk weighted assets:

In millions of euros	31 December 2018		31 December 2017	
	EAD	RW As	EAD	RW As
Advanced approach	51	31	61	33
CVA VaR charge		10		12
CVA SVaR charge		21		20
Standardised approach	538	273	344	128
TOTAL	589	304	405	161

4.b.6. Counterparty credit risk management

Counterparty credit risk mitigation techniques

As part of the liquidity and counterparty credit risk management, the Bank monitors the collateral received and posted covering both the market value of the contracts ("variation margin") and the risk of de-favourable market movements in case of default of the counterparty ("initial margin").

As a general rule, when EAD is modelled and weighted according to the IRB Approach, the LGD (Loss Given Default) is not adjusted according to the existing collateral-guarantees since they are already taken into account in the "Effective Expected Positive Exposure" computation (see paragraph 4.b.3. Bilateral counterparty credit risk)..

CVA risk management

The sensitivity of the CVA to the credit spreads is partially compensated by hedging transactions. These hedges are credit default derivatives on certain specific counterparties or on credit spread indices for counterparties for which no specific credit default swap is traded.

4.b.7. Capital charges and risk weighted assets

Capital charges and risk weighted assets for counterparty credit risk:

In millions of euros	RW As		Capital charges	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Central Counterparty (CCP)	61	85	5	7
CVA charge	304	161	24	13
Counterparty credit risk - excl. CCP and CVA charges	1,821	1,555	146	124
Central governments and central banks	2	2	0	0
Corporates	1,375	1,341	110	107
Institutions	439	207	35	17
Retail	4	5	0	0
Add-on Counterparty Risk	-	-	-	-
COUNTERPARTY CREDIT RISK	2,186	1,800	175	144

4.c. Securitisation

Asset securitisation is the process of creating a marketable financial instrument that is backed by the cash flow or value of specific financial assets. During the securitisation process, assets (e.g. consumer loans, receivables, mortgages) are selected and pooled together into a special purpose vehicle (SPV) which issues securities that can be sold to investors.

Proprietary securitisation (Originator under Basel III)

To support its business development, while meeting regulatory capital requirements, BNP Paribas Fortis has launched securitisation programmes. Securitisation of own assets can provide long term funding, liquidity or a capital management tool depending on the requirements. The related securitisation vehicles are fully consolidated and, hence, the securitised assets are reported on-balance in the Consolidated Financial Statements.

BNP Paribas Fortis has created a special purpose vehicle (SPV) called Bass Master Issuer NV/SA to securitise residential mortgage loans originally granted by BNP Paribas Fortis, and a SPV called Esmée Master Issuer NV/SA designed to securitise loans to self-employed people and small and medium-sized enterprises originally granted by BNP Paribas Fortis. Exposures in Bass Master Issuer NV/SA and Esmée Issuer NV/SA are excluded from the table below as bonds issued under these programmes have not so far been sold to third parties and are therefore not regarded as efficient under the current Basel requirements.

BNP Paribas Fortis NV/SA transfers monthly interest and principal repayments on the securitised loans to both Bass Master Issuer NV/SA and Esmée Master Issuer NV/SA. To the extent permitted under the provisions of the programme, the two SPVs use the capital receipts to purchase new loans from BNP Paribas Fortis NV/SA. The interest payments which Esmée Master Issuer NV/SA receive are hedged on a quarterly basis against the interest payable on the issued bonds.

At 31 December 2018, the total notional amount of the notes issued by Bass Master Issuer programme amounted to EUR 28.3 billion, and EUR 10.4 billion for the notes issued by Esmée Master Issuer programme.

At 31 December 2018, the outstanding amount of residential mortgage loans in Bass Master Issuer NV/SA is EUR 27.6 billion and the outstanding amount of loans made to self-employed people and small and medium-sized enterprises in Esmée Master Issuer NV/SA is EUR 9.7 billion.

Additional information on the structure of Bass and Esmée can be found on the BNP Paribas Fortis' website: www.bnpparibasfortis.com/investors/securitization.

Securitisation arranged for clients as sponsor

During 2018, securitisation was provided as a financing alternative for the Bank's clients. In particular, financing via Matchpoint Finance plc ('Matchpoint'), an asset-backed commercial paper (ABCP) vehicle sponsored by BNP Paribas, gave BNP Paribas Fortis' corporate and institutional clients access to an alternative funding source via the capital markets.

Matchpoint's eligible asset purchases are structured to justify an A-1/P-1 rating level. Throughout 2018, Matchpoint's commercial paper was rated in the highest short-term rating category by Standard & Poor's and Moody's: respectively A-1 and P-1.

The legacy vehicle, Scaldis Capital Limited, holding a pool of amortising securities, is fully financed by BNP Paribas Fortis.

Securitisation as investor

BNP Paribas Fortis has made investments in a wide variety of ABS/MBS (asset-backed securities/mortgage-backed securities), with a clear focus on differentiating deal ticket size and diversification by asset type and geographical distribution, ranging from European prime residential mortgage-backed securities (RMBS), to US student loans, credit cards, commercial MBS, collateralised loan obligations (CLOs), consumer ABS, SME and small business loans. Redemptions from these assets are no longer reinvested in the ABS/MBS portfolio.

BNP Paribas Fortis' structured credits are overweighted in investment grade securities (82,2% of the portfolio is investment grade). BNP Paribas Fortis' credit risk exposures arising from these transactions as of year-end 2018 and the valuation methods applied are described in the Annual Report 2018.

The Bank's activities in each of these roles as described above:

In millions of euros	31 December 2018	31 December 2017
Originator	0	0
Sponsor*	753	956
Investor	1.609	2.078
TOTAL EXPOSURE	2.362	3.034

Securitisation risk management

Securitisation transactions arranged by BNP Paribas Fortis on behalf of clients are highly technical and specific in nature. They are therefore subject to a specific risk management system, which comprises:

- independent analysis and monitoring by dedicated teams within the RISK department;
- specific processes (with specific committees, approval procedures, credit and rating policies) in order to ensure a consistent, tailored approach.

4.d. Equity risk

Equity interests held by the Bank outside the Trading Book refers to securities which convey a residual, subordinated claim on the assets or income of the issuer or have a similar economic substance. They include:

- listed and unlisted equities and units in investment funds
- options embedded in convertible and mandatory convertible bonds
- equity options
- super subordinated notes
- commitments given and hedges related to equity interests
- interests in companies accounted for by the equity method.

Modelling equity risk

In accordance with the Capital Requirements Directive, banks using the Internal Risk Based Approach are required to apply a separate treatment to the equity exposures held in their Banking Book. BNP Paribas Fortis therefore applies the Simple Risk Weight approach, except for following equity exposure:

- Until 1 January 2018, all investments held prior to 1 January 2008 (excluding LBO positions) are covered by the grandfather clause and are assigned a standard weighting of 150%.
- Significant financial interests included within the large threshold from CET1 items are assigned a flat 250% weighting. These interests relate to securities in credit or financial institutions and insurance companies in which the Bank holds a stake of more than 10%, as well as credit or financial institutions consolidated under the equity-method.

The Simple Risk Weight approach (SRW) is based on long-term market observations and sets out separate risk weights covering unexpected losses:

- 190% of exposure value for private equity exposures in sufficiently diversified portfolios;
- 290% of exposure value for exchange-traded equity exposure;
- 370% of exposure value for other equity exposures.

In addition, expected losses for equity exposure are deducted from own funds. The model has been approved by the banking supervisor for measuring the capital requirement for equity risk as part of the Basel II approval process.

Exposure (at fair value) to equity risk

In millions of euros	31 December 2018					
	On-balance-sheet amount	Off-balance-sheet amount	Risk Weight	Exposure amount	RW As	Capital Requirements
SRW approach						
Private equity exposures in diversified portfolios	292	100	190%	342	650	52
Exchange-traded equity exposures	248	39	290%	267	774	62
Other equity exposures	344	0	370%	344	1.273	102
Grandfather equity exposures	0	0	150%	0	0	0
Significant financial interests	1.727	0	250%	1.727	4.317	345
Total	2.611	139		2.680	7.014	561

In millions of euros	31 December 2017					
	On-balance-sheet amount	Off-balance-sheet amount	Risk Weight	Exposure amount	RW As	Capital Requirements
SRW approach						
Private equity exposures in diversified portfolios	147	82	190%	188	358	29
Exchange-traded equity exposures	168	25	290%	181	524	42
Other equity exposures	307	2	370%	308	1.138	91
Grandfather equity exposures	375	30	150%	390	585	47
Significant financial interests	1.989	0	250%	1.989	4.972	398
Total	2.986	139		3.055	7.577	606

5. MARKET RISK

Market risk is the risk of incurring a loss of value due to adverse moves in market prices or parameters, whether directly observable or not.

Observable market parameters include, but are not limited to, foreign 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 the bond portfolios, the credit instruments are valued on the basis of the interest rates and the credit spreads, which are considered as market parameters like interest rates and foreign exchange risk. The risk on the issuer of the instruments is also a market risk, called issuer risk.

Liquidity is an important component of market risk. In times of limited or no liquidity, instruments or securities 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 risk of loss on equity holdings as well as the interest rate and foreign exchange risks stemming from banking intermediation activities.

Market risk is split into two parts:

- market risk linked to trading activities and corresponding to trading instruments and derivative contracts;
- market risk linked to banking activities covering the interest rate and foreign exchange risks originating from the bank's intermediation activities.

5.a. Capital requirement and risk weighted assets for market risk

Market Risk Capital Requirement and Risk-Weighted Assets:

In millions of euros	RWAs		Capital requirements	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Internal model	1,373	1,106	110	88
VAR	250	268	20	21
Stressed VAR	919	692	74	55
Incremental Risk Charge (IRC)	204	145	16	12
Standardised approach	470	554	38	44
Trading book securitisation positions	-	-	-	-
MARKET RISK	1,843	1,659	147	133

In BNP Paribas Fortis, the market risk is primarily covered by internal models.

Market Risk – Internal model approach

	31 December 2018	
	RW As	Capital requirements
In millions of euros		
VaR (higher of values a and b)	250	20
Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		6
Average of the daily VaR (Article 365(1)) of the CRR on each of the preceding 60 business days (VaRavg) x multiplication factor (mc) in accordance with Article 366 of the CRR		20
SVaR (higher of values a and b)	919	74
Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		16
Average of the SVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms) (Article 366 of the CRR)		74
IRC (higher of values a and b)	204	16
Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		15
Average of the IRC number over the preceding 12 weeks		16
Total	1,373	110

The market risk calculated using the standardised approach covers the market risk of some entities of the Bank that are not covered by internal models. The standardised approach is used to calculate foreign exchange risk for the banking book (See section 5.c *Market risk related to banking activities*).

Market Risk – Standardised approach

	31 December 2018	
	RW As	Capital requirements
In millions of euros		
Outright products		
Interest rate risk (general and specific)	82	7
Equity risk	0	0
Foreign exchange risk	386	31
Commodity risk	2	-
Options		
Securitisations	-	-
Total	470	37

5.b. Market risk related to trading activities

5.b.1. Introduction

Market risk arises from trading activities carried out by the Corporate and Institutional Banking business and encompasses different risk factors:

- 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 volatility of equity shares and/or equity indices;
- Commodities risk arises from changes in the market prices and volatility 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.

The trading activities of BNP Paribas Fortis are justified by the economic relations with the direct customers of the business lines, or indirectly as market-maker.

5.b.2. Market risk management Organisation

The market risk management system tracks and controls market risks and financial instrument valuation whilst ensuring that the control functions³ remain totally independent from the business Lines.

Within RISK, three departments are responsible for monitoring market risk:

- Risk Global Markets (RISK GM) covers the market risk activities of Global Markets;
- Enterprise Risk Architecture (RISK ERA - ALMT) covers the ALM Treasury activities ;
- Risk International Retail Banking (RISK IRB) covers international retail market 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 activities comply 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 consistent manner, the issues related to market and counterparty risk. The CMRC sets high level trading limits and follows the evolution of the main exposures and stress risk. It meets once every quarter and is chaired by either the CEO or by the Head of Corporate Banking.
- The Product and Financial Control Committee (PFC) is the arbitration and decision-making Committee regarding financial instrument valuation matters. It meets quarterly to discuss 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 Group Finance-Accounting, Corporate Institutional Banking and RISK.
- At business unit level, the Valuation Review Committee (VRC) meets monthly or quarterly to examine and approve the results of the Market parameters review (MAP review) and any changes in reserves. The Valuation Review Committee also acts as referee in any disagreements between trading and the control functions. The committee is chaired by a Senior Trader and other members include representatives from Trading, RISK, Group Valuation and Risk Control 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, to follow up relevant recommendations and to present model governance improvements. The committee is chaired by RISK Global Markets and is composed of representatives of Trading Research and CIB Valuation and Risk Control ("V&RC") and Finance. Any dispute can be escalated to the PFC which can decide.

5.b.3. 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 for certain financial instruments classified in the Banking Book.

Portfolio valuation control is performed in accordance with the Charter of Responsibility for Valuation, which defines the division of responsibilities. These governance policies and practice apply to all Capital Markets and Treasury activities, including the main ALM centre.

In addition to the Charter of Responsibilities, the relevant valuation controls are detailed in specific policies. We detail below the main processes that together form the valuation control governance.

³ Risk, Compliance, Internal Audit and Legal
Pillar 3 disclosure

Transaction booking control

This control comes under the responsibility of the Middle-Office within the Operations Department. However, certain 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. A comprehensive formal review of all the market parameters is performed at month-end. The types of parameters controlled by V&RC 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. The RISK function of the Group is in charge of controlling valuation methodologies as well as the most complex parameters, which are highly dependent on the choice of models.

The general principles of the Market parameter reviews are described in the Charter of Responsibility on Valuation and in 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 parameters are described in the Market Data Cartography which is maintained by V&RC. The responsibilities of RISK and V&RC are defined for each point in time and 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 Middle Office and Finance who enter it in accounting records. The results are communicated to the Trading management during Valuation Review Committee meetings, where a final decision or escalation is made. The opinion of the Control functions prevails. Any significant persistent disagreement can nevertheless be escalated to the PFC.

Models approval and reviews

For operations whose nature is common to BNP Paribas and BNP Paribas Fortis, BNP Paribas Fortis uses BNP Paribas models. Should BNP Paribas Fortis have specific products or activities not monitored outside BNP Paribas Fortis, RISK BNP Paribas Fortis would, in close cooperation with RISK BNP Paribas, draw up official valuation methodologies and reserve policies. In this case, RISK BNP Paribas Fortis would also be responsible for the 'models/products' mapping. The whole BNP Paribas model control framework must guarantee that the use of models is compliant with the IFRS standard relating to the fair value measurement of financial instruments.

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 premium for risks that cannot be diversified or hedged, as appropriate.

The reserves cover mainly:

- bid-offer and liquidity spreads
- model or market parameter uncertainties
- the elimination 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 documents are updated regularly. The analysis of reserve variations is reported at the monthly VRC.

Reserve methodologies are regularly improved and any change is deemed to be a Valuation Model Event. Reserve improvements are generally motivated by the conclusion of a model review or by calibration with market information during the market parameter review process.

Additional Prudent Valuation Adjustments (PVA) are calculated in accordance with the last version of the Regulatory Technical Standards (RTS) published by the EBA on 23 January 2015. The RTS requires banks to estimate the price of their fair-valued positions using at least a 90% level of confidence.

There are different categories of PVA, the main ones being linked to close-out costs, market price uncertainty, concentration risk and model risk. Based on these PVA, BNP Paribas Fortis computes Additional Valuation Adjustments (AVA) including reserves already taken into account in the Fair Value as well the diversification mechanism described in the RTS.

From a prudential perspective, AVA are deducted from the common equity Tier 1 capital.

Day-one profit or loss

Some transactions are valued using 'non-observable' parameters. IFRS 9 requires the recognition of any day-one P&L for non-observable transactions to be deferred where the initial model value has to be calibrated with the transaction price.

RISK works with Group 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 duly documented.

The P&L impact of the P&L deferral is calculated by the Middle Office.

Observability rules are also used for the financial disclosures required by IFRS 7.

During 2018, no day-one-profit was booked for transactions at BNP Paribas Fortis.

5.b.4. 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 setup and limit setting

BNP Paribas Fortis uses an integrated system to follow trading positions on a daily basis and manage VaR calculations. This system tracks not only the VaR, but also detailed positions and sensitivities to market parameters based on various simultaneous criteria (such as by currency, product or 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, Business Line and Activity. Hence delegation exists from CMRC level right down to trading heads. 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 department regarding 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 (limits, VaR monitoring, core risk analysis, etc.). The MCLAR (Market, Counterparty and Liquidity Analysis and Reporting) team within RISK ERA (Enterprise Risk Architecture) is responsible for compiling and circulating main global risk reports.

The following risk reports are generated on a regular basis:

- Bi-weekly 'Main Position' reports for each Business Line, summarising all positions and highlighting items needing particular attention; these reports are mainly intended for Business Line managers;
- Monthly risk dashboard covering Capital Markets' market and counterparty risks;
- Quarterly risk dashboard covering the key market, credit, liquidity and counterparty risks;
- Supporting documentation for the core Capital Markets Risk Committee comprising markets and risk event summaries, global counterparty exposure summary, VaR/Stressed VaR evolution, market and counterparty risk stress testing and capital evolution summaries, and market and counterparty risk back-testing.

Value at Risk (VaR)

The VaR is a statistical measure indicating the worst loss for a given portfolio over a given time period within a given confidence interval under normal market conditions. It is not a maximum loss figure and may be exceeded in some cases, for example in the event of abnormal market conditions.

The BNP Paribas Fortis VaR methodology aims at accurately computing a 1-day Value at Risk at a 99% confidence level. The BNP Paribas Fortis 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 abnormality often observed in financial markets as well as correlation between risk factors. A one year rolling window of historical market data with equal weighting (updated monthly) is used to calibrate the simulation.

The main groups of simulated factors include: interest rates, credit spreads, exchange rates, equity prices, commodities prices, and associated implied volatilities. Risk factors returns are either relative or absolute.

The precise valuation method used varies depending not upon the product but upon the type of risk the Bank is capturing. Generally speaking, the methods used are either sensitivity-based or full-revaluation-based on P&L grid interpolation so as to incorporate both linear and - especially for derivatives - non-linear effects. In both cases, BNP Paribas Fortis computes general and specific risk as a whole, including the diversification effect through the correlation between risk factors.

The algorithms, methodologies and sets of indicators are reviewed and improved regularly to take into account the evolution of the capital market.

Following agreement with the Belgian and French regulators (NBB and ACPR), the BNP Paribas internal model has been extended since 2011 to BNP Paribas Fortis. For information purposes, the market risk calculated based on the standardised approach only represents 10.7% of the total capital charge for market risk of BNP Paribas Fortis on 31 December 2018.

The VaR is a measure that does not take into account losses above the confidence interval and is not applicable to losses linked to intraday market movements. Risk measures like the SVaR and IRC complete the monitoring framework and the market risk management within BNP Paribas Fortis.

Evolution of the VaR (one-day, 99%)

The VaR figures set out below are calculated from the internal model for market risk, which uses parameters that comply with the regulation in place. They are based on a one-day time horizon and a 99% confidence interval.

In 2018, total average VaR was EUR 1.7 million (with a minimum of EUR 1.2 million and a maximum of EUR 2.3 million), after taking into account the EUR 0.5 million netting effect between the different types of risks. These amounts break down as follows:

Value at Risk (1-day, 99%):

<i>In millions of Euros</i>	31 December 2018				31 December 2017	
	Average	Minimum	Maximum	End of Year	Average	End of Year
Interest rate risk	1,7	1,2	2,2	1,8	2,1	1,8
Credit risk	0,2	0,1	1,2	0,2	0,3	0,2
Foreign exchange risk	0,3	0,1	1,3	0,2	0,3	0,2
Equity risk	-	-	-	-	-	-
Commodity price risk	-	-	-	-	-	-
Netting effect	(0,5)	(0,2)	(2,4)	(0,4)	(0,5)	(0,4)
TOTAL VALUE AT RISK	1,7	1,2	2,3	1,8	2,2	1,8

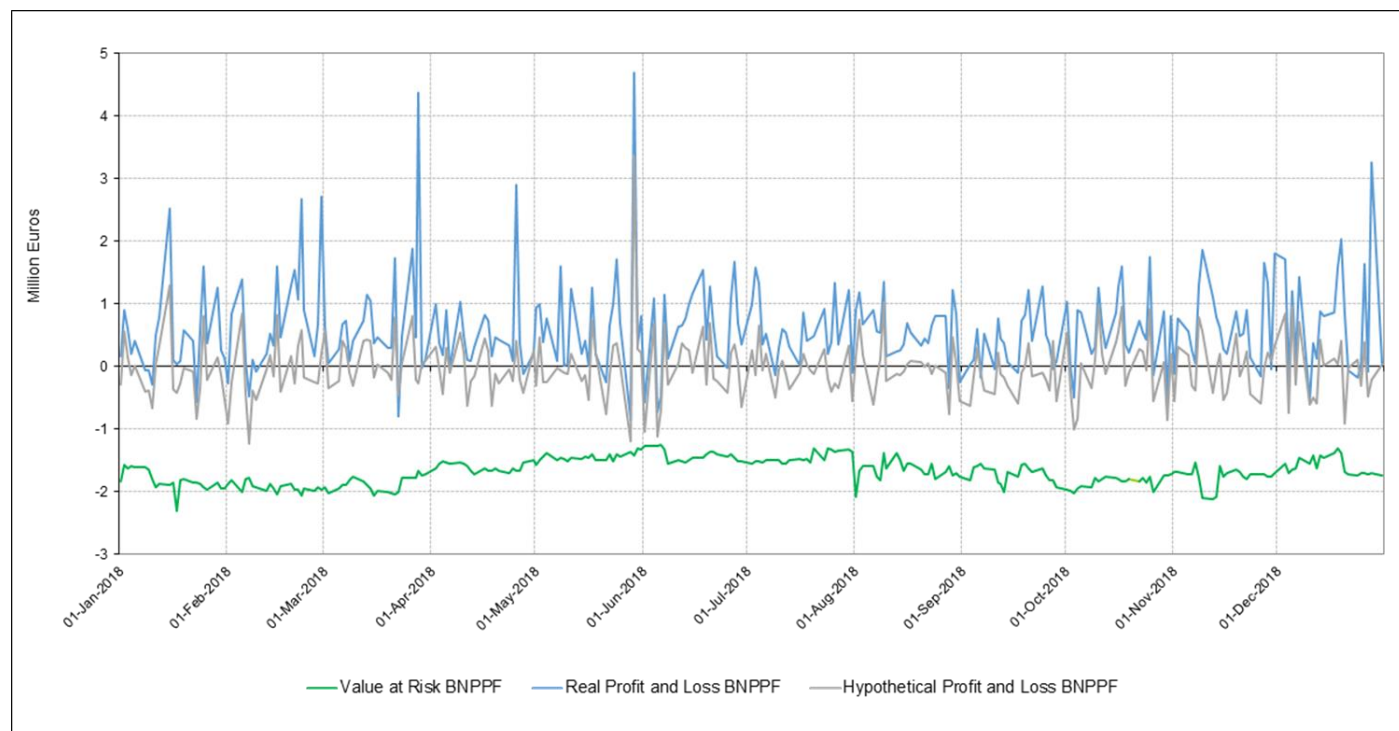
RISK continuously tests the accuracy of the internal model through a variety of techniques including a regular comparison over a long period between the daily losses on market activities with the VaR (1 day).

This backtesting consists in comparing the daily VaR in the trading book with the actual result generated. According to regulations, BNP Paribas completes this framework ("real backtesting") by a comparison of daily VaR and "hypothetical" results generated by the trading portfolio ("hypothetical backtesting"). The "hypothetical" result includes all the components of the actual result except intra-day income, fees and commissions. A backtesting event is reported when a loss, real or hypothetical, exceeds the amount of daily VaR. The confidence interval used to calculate the daily VaR is 99%, which corresponds theoretically to two to three events observed per year.

The number of events is computed at least quarterly and is equal to the higher of the number of overshootings (excesses) for the hypothetical and real changes in the portfolio's value.

In 2018, no real and hypothetical backtesting overshootings were observed.

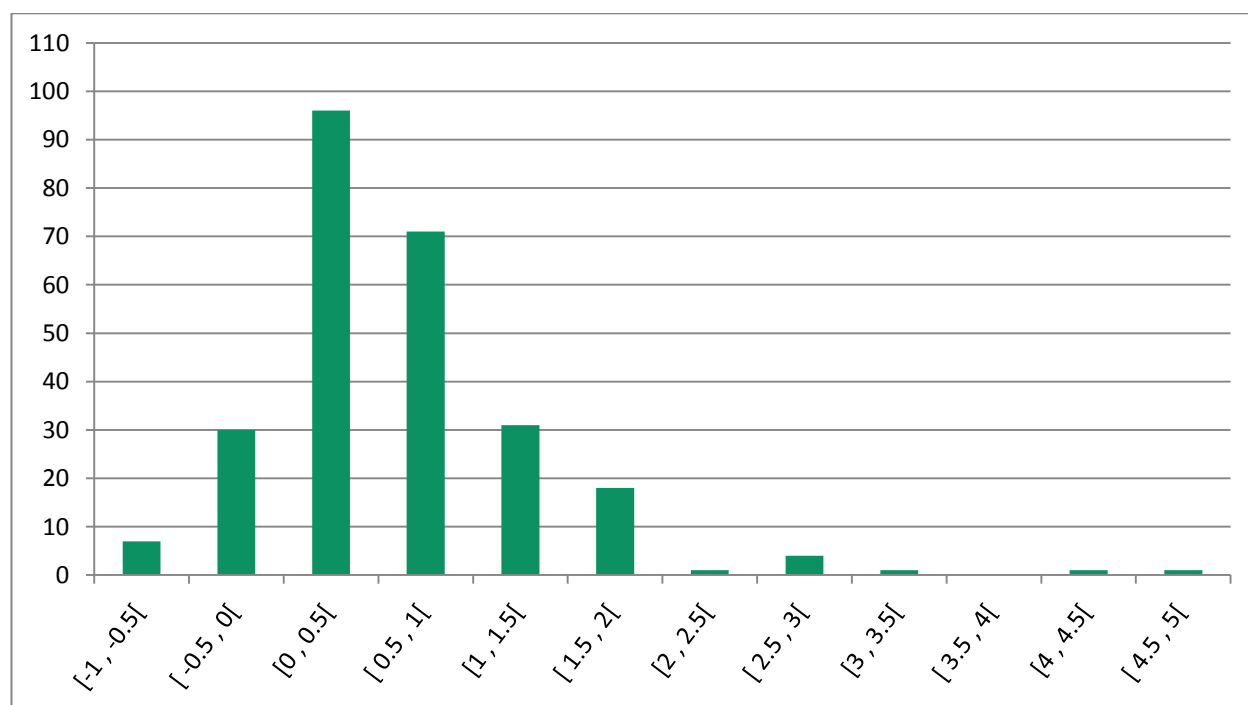
Comparison between (1-day, 99%) VaR and daily trading revenues



Distribution of daily income

The following histogram presents the distribution of the daily trading revenues of BNP Paribas Fortis. It indicates the numbers of trading days during which the revenue reached each of the levels indicated on the horizontal axis in millions of euros.

Distribution of daily trading revenues (in millions of euros):



Trading activities generated a positive result for more than 83% of the trading days of 2018.

Evolution of the VaR (ten-day, 99%)

The VaR figures 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 ('Supplement to the Capital Accord to Incorporate Market Risks'). They are based on a ten-day time horizon and a 99% confidence interval.

In 2018, total average VaR for BNP Paribas Fortis was EUR 5.4 million (with a minimum of EUR 3.9 million and a maximum of EUR 7.1 million), after taking into account the EUR (1.6) million netting effect between the different types of risks.

Value at Risk (10-day, 99%):

In millions of euros	31 December 2018				31 December 2017	
	Average	Minimum	Maximum	End of Year	Average	End of Year
Interest rate risk	5.3	3.7	6.9	5.8	6.7	5.8
Credit risk	0.8	0.3	3.8	0.6	1.0	0.6
Foreign exchange risk	0.8	0.3	4.1	0.5	0.9	0.5
Equity risk	-	-	-	-	-	-
Commodity price risk	-	-	-	-	-	-
Netting effect	(1.6)	(0.5)	(7.6)	(1.2)	(1.7)	(1.2)
TOTAL VALUE AT RISK	5.4	3.9	7.1	5.8	6.9	5.7

Stressed VaR

A Stressed VaR (SVaR) is calibrated over a one-year period including a crisis period. This period is a 12 full months period and applies to the entire Bank's perimeter. Exhaustive risk factors history must be available so as to compute the risk metrics, and the period must be still relevant when applied to the current trading book. This choice is reviewed quarterly by an expert committee. The period is chosen according to a qualitative approach among the three scenarios leading to the maximal stressed risk.

The period of 3 January 2008 to 31 December 2008 has been considered as the current reference period for the calibration of Stressed VaR.

BNP Paribas Fortis uses the same methodology as to compute the VaR, considering the market parameters on this reference period.

Stressed value at Risk (one-day, 99%):

In millions of euros	31 December 2018				31 December 2017	
	Average	Minimum	Maximum	End of Year	Average	End of Year
STRESSED VALUE AT RISK	6.1	2.3	9.6	5.3	4.0	2.9

Incremental Risk Charge (IRC)

The IRC approach measures losses due to default and ratings migration at the 99.9% confidence interval over a capital horizon of one year, assuming a constant level of risk to this horizon.

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. It has been approved by both the French and Belgian banking supervisors.

The calculation of IRC is based on the assumption of a constant level of risk to the one-year capital horizon, implying that the trading positions or sets of positions can be rebalanced within this 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 ratings-based simulation for each obligor, which captures both the risk of the default and the risk of rating migration. The dependence among obligors 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.

Comprehensive risk measure (Correlation portfolio)

The comprehensive risk measure (CRM) is a charge for structured credit correlation products in the Trading Books. The CRM is not applicable to BNP Paribas Fortis.

Components of the risk-weighted assets calculation for market risk under the internal model approach

Parameter values used in the internal model

In millions of euros	31 December 2018	31 December 2017
VaR (10 days, 99 %)		
Maximum	7.13	14.94
Average	5.35	6.90
Minimum	3.90	4.40
End of Year	5.84	5.72
SVaR (10 days, 99 %)		
Maximum	30.50	30.41
Average	19.40	12.54
Minimum	7.36	7.51
End of Year	16.75	9.17
IRC (99,9 %)		
Maximum	15.84	26.64
Average	9.46	16.00
Minimum	5.05	9.62
End of Year	12.73	9.96
CRM (99,9 %)		
Maximum	0.00	0.00
Average	0.00	0.00
Minimum	0.00	0.00
End of Year	0.00	0.00

Securitisation positions in Trading Books outside correlation portfolio

This additional capital charge for re-securitisation is not applicable to BNP Paribas Fortis.

Market Risk stress testing framework

A range of stress tests are performed to simulate the impact of extreme market conditions on the value of the global Trading Books. Stress tests cover all market activities, applying a range of stressed market conditions.

Scenarios

The fundamental basic approach of the current Trading Book stress testing framework combines 'bottom-up' and 'top-down' stress testing:

- Macro Scenarios ('top-down') comprise the evaluation of a set of global level stress tests. These scenarios assess the impact of severe market movements on BNP Paribas Fortis' trading positions in relation 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 or stock market crash.

The official macro stress test scenarios currently comprise a range of eight different stress tests. The results of these scenarios are reviewed at every Capital Markets Risk Committee session.

- 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', leading to a drop in trading and a steepening of the interest rate curve;
- Scenario 3: generic emerging market crisis designed to test the global risk of these markets;
- Scenario 4: credit crunch, leading to a general risk-aversion;

- Scenario 5: euro crisis: low GDP⁴ expectations or threat of a country leaving the euro and a significant weakening of the currency;
- Scenario 6: Energy crisis scenario driven by geopolitical turmoil with severe consequences for energy markets;
- Scenario 7: US crisis scenario, mostly based on a structural US 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', at Group level): 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 such as complex market dislocations or idiosyncratic risk, which may not be easily identified under the global macro scenarios. This process facilitates the classification of risk areas into those where there may be lower liquidity and those where the risk may be more structural in nature.

Process

It is the analysis and possible combination of the above scenarios which enables to build an Adverse Scenario for the trading books to be constructed. These official macro stress scenarios are presented at each Capital Markets Risk Committee along with the Adverse Scenario.

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 credit risk and decides upon the detailed composition of the CMRC official Stress Tests.

Stress testing is the core element of tail risk analysis, which is also captured through 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.

5.c. Market risk related to banking activities

Market risk relating to banking activities encompasses the risk of loss on equity positions on the one hand, and the interest rate and currency risks stemming from banking intermediation activities and investments on the other. The equity and currency risk give rise to a weighted assets calculation under Pillar 1; interest rate risk in relation to banking activities falls under Pillar 2.

Interest rate and currency risks in respect of banking intermediation activities mainly relate to Retail Banking activities, the Bank's specialised financing subsidiaries (leasing, factoring, Arval), the CIB financing businesses and the Bank's own investments, funding and hedging transactions. These risks are managed by the ALM Treasury Department.

In BNP Paribas Fortis ALM Treasury reports directly to the Chief Operating Officer responsible for Functions; BNP Paribas Group ALM Treasury has functional authority over the BNP Paribas Fortis ALM Treasury staff..

Strategic decisions regarding the interest rate and the currency risk in respect of the banking intermediation activities are made by the Asset and Liability Committee (ALCo), which oversees ALM & Treasury activities; such committees have been set up at Group and at local Management Perimeter level. The Management Perimeter of BNP Paribas Fortis consists of a homogeneous group of prudentially consolidated entities of the Bank..

⁴ Gross Domestic Product
Pillar 3 disclosure

5.c.1. Currency risk

Calculation of risk-weighted assets

Currency risk relates to all transactions whether part of the Trading Book or not. This risk is treated in the same way under Basel I, Basel II and Basel III.

Except for BNP Paribas Fortis Belgium's currency exposure, which is calculated using the BNP Paribas Fortis internal model approved by the banking supervisor, exposure to currency risk is now determined under the Standardised approach, using the option provided by the banking supervisor to limit the scope to operational currency risk.

BNP Paribas Fortis 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), minus 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 at the reporting date and aggregated to give the Bank'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 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 requirements for currency risk are as follows:

- Matched positions in currencies of Member States participating in the Economic and Monetary Union are subject to a capital requirement of 1.6% of the value of the matched positions.
- 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.

Currency risk and hedging of net income generated in foreign currencies

BNP Paribas Fortis' exposure to operational currency risks stems from net income in currencies other than the euro. The Bank's policy is to hedge on a monthly basis all its non-EUR net income against EUR. Revenues generated locally in a currency other than the operation's functional currency are hedged locally. Net income generated by foreign subsidiaries and branches and positions relating to portfolio impairment are managed and hedged centrally on a regular basis.

Currency risk and hedging of net investments in foreign operations

BNP Paribas Fortis' currency position on investments in foreign operations arises mainly from branch capital allocations and equity interests denominated in foreign currencies, financed by purchasing the currency in question.

The Bank's policy is to hedge the portfolio exposure to liquid currencies by borrowing the investment currency. Such borrowings are documented as hedges of net investments in foreign operations. However, for more illiquid currencies for which borrowing is difficult, the ALCo can decide not to borrow or to borrow part of the invested amount.

5.c.2. Interest rate risk

5.c.2.1. Organisation of Interest rate risk management

The Board of Directors assigns responsibility to the Chief Executive Officer for the management of interest rate risk in the banking book; the Chief Executive Officer delegates the management responsibility to the Bank Asset and Liability Management Committee (ALCo). The permanent members of the Bank ALCo are the Chief Operating Officer with responsibility for functions (Chairman), the Executive Board members heading up core businesses, the Chief Risk Officer, the Chief Financial Officer, the Head of ALM Treasury, the Head of BNP Paribas ALM Treasury Domestic Markets Steering and the Head of the Bank ALM Treasury Steering; other ALCo members belong to ALM Treasury, Risk or Finance.

The Bank ALCo which meets on a monthly basis is responsible for defining the interest rate risk profile of the Bank's banking book and for defining and tracking interest rate risk monitoring indicators and assigning limits.

ALM Treasury is in charge of the operational implementation of decisions related to the management of the interest rate risk of the Banking Book.

The RISK Function participates in the ALCo and oversees the implementation by ALM Treasury of the relevant decisions made by this committee. It also provides second-line control by reviewing the models & risk indicators, monitoring the level of risk indicators and ensuring compliance with the limits assigned.

The Banking Book includes all interest bearing assets and liabilities of all the Business Lines of BNP Paribas Fortis (including the ALM Treasury own investment and hedging transactions) with the exception of authorised trading activities (being client hedging and market making).

Transactions initiated by each BNP Paribas Fortis Business Line are systematically transferred to ALM Treasury by internal analytical contracts booked in the management accounts or by loans and borrowings.

The Bank's strategy for managing global interest rate risk is based on closely monitoring of the sensitivity of the Bank's interest earnings to changes in interest rates, factoring in all interest rate risks (repricing or gap risk, basis risk and optional risk); the aim is to ensure the stability and regularity of the total net interest margin. This management process requires an accurate assessment of the risks incurred so that the Bank can determine and implement the most optimal hedging strategies.

Interest rate risk is mitigated using a range of different instruments, the most important of which are derivatives - primarily interest rate swaps and options. Interest rate swaps are used to change the linear risk profile, which is mainly due to long-term fixed-rate assets and liabilities. Options are used to reduce non-linear risk, which is mainly caused by embedded options sold to clients, e.g. caps and prepayment options on mortgages.

5.c.2.2. Measurement of interest rate risk

Interest rate positions in the Banking Book are measured and monitored through a number of indicators, taking into account the specific features of the risks managed. The choice of indicators and the risk modelling are reviewed by Risk; the results of these reviews are presented to the ALCo on a regular basis. The interest rate risk measurement indicators are consistently presented to the Alco and serve as a basis for operational risk management decisions.

Types of interest rate risk

BNP Paribas Fortis has, in line with the BNPP Group framework, defined the concepts of standard risks, modelled risks and structural risks in relation to the different nature of the transactions or portfolios in the Banking Book.

Standard risk is generated by balance sheet elements for which the theoretical micro-hedge of such risk is directly derived from the contractual characteristics of the underlying transactions.

Modelled risk corresponds to transactions where the theoretical micro-hedge cannot simply be derived from the contractual characteristics of the underlying transactions and requires modelling. This is for example the case for savings accounts (modelling of a risk-replicating portfolio) and for prepayments of mortgages (modelling of future global prepayment behaviour).

The structural rate risk is related to net equity and the non-cyclical part of non-interest-bearing current accounts; the reinvestments of those zero-cost balance sheet items generate regular revenues but these are sensitive to interest rate levels. However it is not possible to define a single hedging strategy to fully neutralise this risk exposure; in this case the Bank includes all the possible so-called "neutral" management strategies in terms of interest rate risk.

Indicators

The interest rate risk in the Banking Book is measured and monitored through the following indicators:

- Interest Rate Gaps

Interest rate gaps measure for each future time-bucket the potential rate-characteristic mismatches between assets and liabilities (fixed rate and indexation type). The optional effects, in particular linked to behavioural options, are translated into these gaps by their delta equivalent exposures (linear representation).

The maturity split is determined on the basis of the contractual terms of the transactions and historical observations of customer behaviour (for modelled risks). The maturities of non-interest-bearing current accounts

and of net equity are defined according to a conventional approach in order to take into account a Group management benchmark and all the possible strategies defined as “neutral” in terms of interest rate risk.

- Earnings Indicators: Net Interest Income Sensitivity

Interest rate risk in the Banking Book is measured on a *going-concern basis*, incorporating dynamic changes in balance sheet items, through an indicator of net interest income sensitivity to interest rate changes.

The existence of partial or zero correlations between customer interest rates and market rates coupled with volume sensitivity to interest rates generates a risk to future revenues.

The sensitivity of revenues to changes in market rates is one of the key indicators used by the Bank in its analysis of interest-rate risk. This revenue sensitivity is calculated across the entire Banking Book including the customer banking intermediation businesses and equity. It factors 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 customer balances and customer rates, notably the effects of inertia on margins due to changes in interest rates are also taken into account.

This indicator dd. 31/12/2018 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%) has a positive impact of respectively EUR 53 million, EUR 150 million and EUR 219 million.

Sensitivity of revenues to global interest rate risk based on a 50 basis point increase or decrease in the interest rates

In millions of euros	31 December 2018	
	For +50bps shock	For -50bps shock
Year 1	53	(39)
Year 2	150	(123)
year 3	219	(213)

The main underlying risk (in a downward shock) is due to the floors on client rates for savings and current accounts

- Value Indicators: the Supervisory Outlier Test

As the assets and liabilities of the Bank’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 impact the Bank’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 the end of 2018, the ratio was 1,2% for a 200-basis-point decrease and 3,6% for a 200-basis-point increase. These values are both well below the materiality threshold of 20%.

5.c.2.3. Management and Hedging of interest rate risk:

The hedging strategies for interest rate risk in the Banking Book are defined and implemented by currency.

The hedges can comprise swaps and options and are typically accounted for as fair value or cash flow hedges. They may also take the form of HQLA securities which are mainly accounted for in ‘Hold to Collect and Sale’.

Accounting treatment of interest rate hedges

Depending on the hedging objective, derivative financial instruments used for hedging purposes are qualified either as fair value hedges or cash flow hedges. Each hedging relationship is formally documented at inception. The documentation describes the hedging strategy and the nature of the hedged risk, identifies the hedged item and the hedging instrument and describes the methodology used to test the expected (prospective) and actual (retrospective) effectiveness of the hedge.

Hedging of financial instruments recognised in the balance sheet (fair value hedges)

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 consist mainly of Hold to Collect or Hold to Collect and Sale securities; individual liabilities hedging consist mainly of fixed income securities issued by BNP Paribas Fortis.

Hedges of portfolios of financial assets and liabilities, constructed by currency, relate to:

- fixed-rate loans (property loans and equipment loans);
- fixed-rate deposits (mainly demand deposits).

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, prospective outstanding amount of the hedged items are measured and have to be higher than the prospective outstanding amounts of the hedging instruments.

Cash Flow Hedge

In terms of interest rate risk, BNP Paribas Fortis uses derivative instruments to hedge fluctuations in income and expenses arising on floating-rate assets and liabilities. Highly probable forecasted transactions are also hedged. Hedged items are split by currency and benchmark interest rate. The Bank uses derivatives to hedge some or all of the risk exposure generated by these floating-rate instruments.

These hedging relationships are documented and assessed on the basis of maturities and benchmark interest rate.

6. SOVEREIGN RISKS

Sovereign risk 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 Bank 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 Bank holds sovereign bonds as part of its liquidity management process. Liquidity management is based a.o. on holding bonds which are eligible as collateral for refinancing by central banks; a substantial share of this “liquidity buffer” consists of highly rated debt securities issued by governments, supra-national authorities and agencies, representing a low level of risk. A part of this same portfolio has interest rate characteristics that contribute to the banking book interest rate risk hedging strategies.

BNP Paribas Fortis' sovereign bond portfolio

<i>In millions of euros</i>	31 December 2018	31 December 2017
Eurozone		
Belgium	6,856	9,797
Italy	1,137	1,165
Spain	662	660
Netherlands	548	553
France	447	725
Austria	319	911
Luxembourg	197	198
Finland	52	53
Ireland	87	152
Portugal	50	146
Total Eurozone	10,355	14,360
Czech Republic	50	73
Other EEE countries (European Economic Area)	0	0
Total Eurozone and other EEE	10,405	14,433
Turkey	1,001	1,105
Total	11,406	15,538

The table above shows central government bonds only; exposure to other sovereign risks, such as Belgian regions and communities, are excluded

7. OPERATIONAL RISK

RISK MANAGEMENT FRAMEWORK

Regulatory framework

In line with the BNP Paribas Group framework, BNP Paribas Fortis has implemented an all-embracing, single, operational risk management framework for the entire Bank, which complies with the Basel III criteria laid down in the Advanced Measurement Approach ('AMA'). This approach supports the organisation by offering better management of risk through heightened operational risk awareness. It ensures effective measurement and monitoring of the operational risk profile.

Key players and governance

An appropriate risk management structure has been created around a model with three levels of defence, which places the primary responsibility for operational risk management and mitigation with the Businesses. The role of second line of defence is assumed by the integrated independent control functions Compliance, Legal and RISK. Their role is to ensure that the operational risk management framework is properly embedded, that the operational risks that are identified, assessed, measured and managed reflect the true risk profile and that the resulting levels of own funds are adequate. The third line of defence is provided by the General Inspection (internal audit) department, which provides assurance that risk structures and policies are being properly implemented.

The main governance bodies for the areas of Operational Risk & Internal Control are the Internal Control Committees (ICCs).

BNP Paribas Fortis has three ICCs, each chaired by a member of the Executive Committee. In addition, there is also an ICC at the level of the Executive Committee chaired by the Chief Executive Officer.

The role of the ICCs covers the management of the operational permanent control framework and the management of operational risks and non-compliance risks. Operational risks and non-compliance risks include reputational risk, fraud risk, financial reporting risk, tax risk, legal risk, risk of not complying with laws, regulations and policies, operational risks related to people, processes, systems and the external environment, and business risk. The role of the ICCs includes, but is not limited to:

- creating an organised overall view of the operational permanent control framework and the management of BNP Paribas Fortis' operational risks and non-compliance risks;
- analysing and taking decisions on these subjects;
- providing a level of warning, alert and escalation for any weaknesses observed;
- demonstrating and evidencing the involvement of the Executive Board and Executive Committee in the management of these issues and follow-up on actions undertaken.

The objective of the ICCs is to allow the businesses and functions to signal the most significant operational risks, risks of non-compliance and weaknesses in the permanent control environment, highlight the associated action plan, and provide an overview of the status of the measures taken.

The Advanced Measurement Approach for Operational Risk Management

A framework encompassing the four following elements is required for an Advanced Measurement Approach:

- Loss data collection ('Historical Incidents') is the first building block of the Operational risk management framework. Operational losses that occur throughout the organisation are systematically collected in a central database.
- BNP Paribas Fortis supplements this internal loss data with external loss data sources, using both consortium and public databases.
- A third element of the framework consists of forward-looking risk assessments ('Potential Incidents'), which serve to draw up the Bank's risk profile and are used as primary input for calculating capital requirements. Potential Incidents provide an insight into different kinds of operational risks:

- Those risks that are closely related to the internal organisation and control environment. These risk events, despite the fact they may occur frequently, have a rather low impact on the organisation.
- More systemic or low frequency-high impact operational risks. This captures the operational risks to which the organisation is subject due to the type of activities in which it engages and the business environment in which it operates.

Potential incidents are examined within each Business and support Function and result in a description of the identified risks, an analysis of the causal drivers of these risks and a description and assessment of the control environment. Lastly, the residual risk exposure is quantified.

- Operational risk triggers (key risk indicators or key performance indicators) are followed up to provide alerts on apparent changes in the operational risk profile due to internal or business environment factors.

Operational Control and Mitigation

BNP Paribas Fortis has a variety of tools to control and mitigate operational risk. Potential Incidents, Historical Incidents and key risk indicator movements enable the formalisation of actions to further control operational risks. These actions often relate to organisational and process contexts. Centrally coordinated operational risk mitigation techniques include business continuity management, information security measures and insurance. The Bank also has in place a governance dealing with the validation of exceptional transactions, new products and new activities. These processes essentially rely on Exceptional Transaction and New Activity Committees.

8.COMPLIANCE AND REPUTATIONAL RISK

Compliance mission

The overall mission of the Compliance department is to provide reasonable assurance of the consistency and effectiveness of the compliance of BNP Paribas Fortis' activities and to safeguard the Bank's reputation through advice, oversight and independent controls.

The Compliance department's role, as a second line of defence, is to supervise the effective management of compliance risk. This involves policy-setting, providing advice, performing controls, providing assurance that the Bank is complying with rules and regulations and raising the awareness of colleagues of the need to follow key compliance principles:

- financial security: anti-money laundering, combating corruption and the financing of terrorism, financial sanctions and disclosure to financial intelligence units, fiscal deontology, anti-bribery and anti-corruption;
- customer protection: compliance of the Bank's organisation and processes with the customer protection regulatory obligations regarding invest, lending, insurance and daily banking services;
- employee integrity: covers codes of conduct, gifts policy, conflicts of interest and a personal transactions policy;
- market integrity: market abuse, conflicts of interest;

The Compliance department sets policies and gives binding advice in these areas. The advice from Compliance may be escalated to a higher level until consensus is found, so as to ensure appropriate issue resolution.

Compliance organisational setup

The Compliance function has been reviewed in 2015. The Compliance function is organised as an independent, integrated and decentralized function. BNP Paribas Fortis' Chief Compliance Officer reports to hierarchically BNP Paribas' Head of Domestic Markets Compliance and has a functional reporting line to BNP Paribas Fortis' Chief Executive Officer.

Compliance has direct, independent access to the Board's Risk Committee and Audit Committee, and is a permanent invitee to both Committees. The Chief Compliance Officer is a member of the Bank's Executive Committee.

Basic principles

The management of compliance and reputational risks is based on the following fundamental principles:

- individual responsibility: compliance is everyone's responsibility, not solely the responsibility of the Compliance department.
- exhaustive and comprehensive approach: the scope of compliance extends to all banking activities. In this respect, the Compliance department has unrestricted access to all required information.
- independence: Compliance staff exercise their mission in a context which guarantees their independence of thought and action.
- primacy of Group policies over local policies as far as it is consistent with national law.

9. LIQUIDITY

Liquidity risk is the risk of the Bank 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 Bank's liquidity risk is managed under a global liquidity policy approved by the Board of Directors. This policy is based on management principles designed to apply both in normal conditions and in a liquidity crisis. The Bank's liquidity position is assessed on the basis of internal standards and regulatory ratios.

9.a. Liquidity risk management policy

Objectives

The objectives of the Bank's liquidity management policy are to secure a balanced financing structure for the development of the BNP Paribas Fortis business activities, and 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 Bank's financing capacity;
 - by price, based on internal liquidity pricing;
- the definition of monitoring indicators which enable assessment of the Bank'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 Bank's liquidity policy defines the management principles that apply across all BNP Paribas Fortis entities and businesses and across all time horizons.

Governance

As for all risks, the Chief Executive Officer is granted authority by the Board of Directors to manage the Bank's liquidity risk. The Chief Executive Officer delegates this responsibility to the Asset & Liability Committee (ALCo).

The Asset & Liability Committee is responsible for:

- defining the Bank's liquidity risk profile;
- monitoring compliance with regulatory liquidity ratios;
- deciding and monitoring management indicators and calibrating the quantitative thresholds set for the bank's businesses;
- deciding and monitoring the liquidity risk indicators and associating quantitative thresholds to them where necessary;
- deciding and overseeing implementation of liquidity risk management strategies, including monitoring of business lines, in normal and stressed conditions.

In particular, the Asset & Liability Committee is informed about funding programmes and programmes to build up liquidity reserves, simulations in crisis conditions (stress test), and about all events that may arise in crisis situations. The Asset & liability Committee is tasked with defining the management approach in periods of crisis (emergency plan).

The Asset & Liability Committee meets every month under normal conditions and with higher frequency in stressed conditions.

The permanent members of the Asset & Liability Committee are the Chief Operating Officer with responsibility for functions (Chairman), the Executive Board members heading up core businesses, the Head of Global Markets, The Chief Risk Officer and or his deputy, the Chief Financial Officer, the head of ALM Treasury, the head of ALM Treasury BNP Paribas Group, the head of ALM Domestic Markets BNP Paribas Group, the head of Management Control and the Chief Financial Officer of Domestic Markets BNP Paribas.

Across the Bank, ALM Treasury is responsible for the operational implementation of the Asset & Liability Committee liquidity management decisions. The Asset & Liability Committees in entities or groups of entities are responsible for local implementation of the strategy decided by the Bank's Asset & Liability Committee to manage the bank's liquidity risk.

ALM Treasury is responsible for managing liquidity for the entire Bank 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.), and loan securitisation programmes for the Bank. ALM Treasury is tasked with providing internal financing to the Bank's core businesses, 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.

The RISK Function participates in the Asset & Liability Committee and the local ALCo's 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.

The Risk Committee reports quarterly to the Board of Directors on liquidity policy principles and the Bank's liquidity position.

The Finance Function is responsible for producing the standardised regulatory liquidity indicators, as well as the internal monitoring indicators. Finance oversees the consistency of the internal monitoring indicators defined by the bank's ALM Committee. The Finance Function takes part in the Asset & Liability Committee and the local ALCo's.

9.b. Liquidity risk management and supervision

Business lines' internal monitoring indicators

The monitoring indicators relate to the funding needs of the Bank's businesses under both normal and stressed conditions. These monitoring indicators are part of the Bank's budget planning exercise with set objectives that are routinely monitored (monthly).

Funding requirements of the Bank's businesses

The funding requirements associated with the activity of the Bank's businesses are managed in particular by measuring the difference between commercial funding requirements (customer loans and overdrafts) and commercial funding resources (customer deposits, sale of the Bank's debt securities to customers, etc.). This indicator makes it possible to measure the business lines' liquidity consumption under a normal business scenario. It is supplemented with an indicator that makes it possible to measure the business lines' funding requirements over a one-month period under a stress test using assumptions defined by the European regulation (Liquidity Coverage Ratio). In addition to this commercial funding requirement indicator, the Bank closely monitors the liquidity reserves and the refinancing provided by ALM Treasury, as well as the Bank's structural resources, under normal conditions and regulatory stress tests. The business lines' total funding requirements, along with the net resources provided by ALMT, and the Bank's structural resources under regulatory stress tests, make up the Liquidity Coverage Ratio (LCR). The management of each of these components enables the Bank to achieve the targeted LCR. The business lines' liquidity consumption is thus integrated in the Bank'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 Bank's overall target. The effective liquidity consumption and funding are then monitored and adjusted, if required, throughout the year in order to meet the Bank's target.

Internal liquidity pricing

All of the Bank's assets and liabilities are subject to internal liquidity pricing, the principles of which are decided by the Bank's Asset & Liability Committee and aim to take account of trends in the cost of market liquidity and the balance between assets and liabilities.

Monitoring indicators

Wholesale funding indicators

Funding sources depend on conditions in the debt markets and are raised from various types of debt investors.

Funding sources are diversified through the use of various distribution networks, entities and collateralised or non-collateralised financing programmes.

The financing structure can also be strengthened by extending maturities, and targeting more stable funding sources.

Encumbrance of the Bank's assets and assets received by the Bank

Assets on the balance sheet and assets received in guarantee used as pledges, guarantees or enhancement of a Bank's transaction and which cannot be freely withdrawn are considered to be encumbered. The following are the main transactions with asset encumbrance:

- Repos and securities lending operations;
- Guarantees given to CCPs;
- Collateralised deposits;
- Guarantees given to central banks as part of monetary policy;
- Assets in portfolios hedging the issue of guaranteed bonds.

Encumbered securities are given as collateral in repurchase agreements, derivatives transactions or securities exchanges. The other assets correspond to the following: firstly, loans under monetary policy constraints or provided as collateral for structured debt; secondly, cash given as collateral against derivatives.

Encumbered and unencumbered assets are shown in the following table according to the formats 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 quarters of the year, not as the sum of the median values for the year. Therefore, the median ratio of encumbered assets relative to balance sheet assets was 8.9% as at 31 December 2018.

Assets

In millions of euros	31 December 2018							
	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
ASSETS	27.394	13.618			280.089	41.969		
Equity instruments	0	0			1.450	0		
Debt securities	11.876	11.374	11.748	11.243	18.076	16.223	18.204	16.352
of which: covered bonds	169	95	169	95	333	333	333	333
of which: asset-backed securities	170	79	169	127	1.493	1.145	1.457	1.256
of which: issued by general governments	11.476	11.221	11.344	11.089	10.207	10.097	10.339	10.230
of which: issued by financial corporations	400	153	404	154	7.217	6.142	7.217	6.138
of which: issued by non-financial corporations	0	0	0	0	578	0	578	0
Other assets	15.592	2.244			261.954	26.864		
of which: loans and advances	13.301	0			0	0		

Collateral received

In millions of euros	31 December 2018			
	Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance	
		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
COLLATERAL RECEIVED	7,005	5,922	3,118	2,793
Loans on demand	0	0	0	0
Equity instruments	0	0	36	0
Debt securities	7,005	5,922	3,106	2,793
of which: covered bonds	30	7	44	25
of which: asset-backed securities	147	17	1,122	466
of which: issued by general governments	5,614	5,609	1,880	1,880
of which: issued by financial corporations	724	93	1,225	929
of which: issued by non-financial corporations	306	225	42	7
Loans and advances other than loans on demand	0	0	0	0
Other collateral received	0	0	0	0
Own debt securities issued other than own covered bonds or ABSs	0	0	0	0
Own covered bonds and asset-backed securities issued and not yet pledged			26,575	0
TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED	33,948	19,540		

Encumbered assets / collateral received and associated liabilities

In millions of euros	31 December 2018	
	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
CARRYING AMOUNT OF SELECTED FINANCIAL LIABILITIES	28,400	31,203
of which: repos	16,679	17,313
of which: secured deposits	6,566	7,293
of which: covered debt issuances	1,750	2,865

Medium- to long-term position

The medium- and long-term liquidity positions are measured regularly at the bank level to evaluate the medium- and long-term resources and uses. In order to do this, each balance sheet item is reviewed by financial maturity using the models and agreements proposed by ALM Treasury and reviewed by the RISK Function.

Stress tests and liquidity reserve

Liquidity stress tests are performed regularly on various maturities (1 day to 3 months) and are based on market factors and/or factors specific to the Bank. The availability of sufficient reserves in the liquidity buffer to cope with a liquidity crisis is regularly measured at Bank level.

The liquidity reserve comprises deposits with central banks, available securities that can be immediately sold on the market or through a repurchase agreement, and available securities and loans that can be refinanced with central banks. The global liquidity reserve (counterbalancing capacity) is calculated net of the payment systems' intraday needs.

One of the ways to strengthen the Bank's liquidity position is to transform less liquid assets into liquid assets by securitising loans (see section 4.c 'Securitisation').

10. REMUNERATION FOR FINANCIAL YEAR 2018 OF MRT

In accordance with European banking regulations, BNP Paribas Fortis SA/NV applies supervisory provisions on remuneration as laid down in:

- European Directive CRD4 of 26 June 2013 and its transposition into Belgian law (the Belgian Banking law of 25 April 2014);
- the European Commission Delegated Regulation of 4 March 2014, on the identification criteria for employees whose professional activities have a material impact on the institution's risk profile ("Material Risk Takers" or "MRT"), on a consolidated basis, in all its branches and subsidiaries, including those outside the European Union;
- EBA guidelines on sound remuneration policies of 27 June 2016 as set out in the NBB position.

The Bank's compensation policy is thus compliant with all of these principles and aims not to encourage excessive risk-taking, to avoid incentives that may lead to conflicts of interest, and not to encourage or reward management activities that are prohibited.

These prudential regulatory provisions apply on a consolidated basis to the Group (including subsidiaries). If there are discrepancies between the regulations, the most stringent provisions are applied.

This report meets the regulatory requirements related to article 450 of the Delegated Regulation (EU) 575-2013 from 26 June 2016 on the prudential requirements applicable to credit institutions and investment firms (CRR).

Employees included in the Bank's MRT category in 2018 have been identified in accordance with the regulation in force and with a methodology comparable to 2017. These employees are subject to all the principles set out in the Group's compensation policy as detailed below.

The number of employees identified as Material Risk Takers (MRTs) at Bank level is detailed under 10.b.3.

10.a. Governance

The Bank's remuneration guidelines and remuneration policy defined and proposed by Human Resources in cooperation with the relevant businesses. They are presented to the Compliance, Risk and Finance Committee (CRIF), the Risk Committee and the Remuneration Committee for advice, before approval by the Board of Directors.

10.a.1. Compliance, Risk and Finance Committee (CRIF)

The CRIF Committee is chaired by Mr. Filip Dierckx, Chief Operating Officer.

The CRIF Committee includes the heads of these three departments (or representatives appointed by them, as well as the Head of HR).

Remuneration policy for MRTs is presented to and discussed by the CRIF Committee, which then issues an opinion on:

- the policy's compliance with current regulations and professional standards;
- its adequacy and consistency with the Bank's risk management policy;
- consistency between variable remuneration practices and the need to ensure a sufficient level of the bank's capital base.

This Committee met five times with respect to the remuneration process for the year 2018.

Risk Committee

The Risk Committee is a committee of the Board of Directors chaired by Mr. Dirk Boogmans.

In Order to promote sound remuneration practices and policies, the Risk Committee, without prejudice to the tasks of the remuneration committee examine whether the incentives provided by the remuneration system appropriately consider risk management, capital requirements and the liquidity position of BNP Paribas Fortis as well as the probability and the distribution over time of the profits.

The Risk Committee met one time to deliberate on the remuneration process for the year 2018.

10.a.2. Remuneration Committee

The Remuneration Committee is a committee of the Board of directors chaired by Mr. Herman Daems.

The committee provides a sound and independent judgement on the remuneration policies and reward practices and related incentives taking into account risk control, net equity needs and liquidity position and, more specifically,

- advises the Board on the remuneration policy, particularly for employees whose activities have a material impact on the institution's risk profile;
- prepares decisions of the board of directors on remuneration, taking into account the long term interest of shareholders, investors and other parties having an interest, as well as to the general interest;

Thus, the Remuneration Committee analyses compensation guidelines and compensation policy for regulated employees, as well as the annual review process guidelines presented by the Executive Management, including:

- parameters for the determination of variable compensation envelopes (i.e. "bonus pools") for business lines and their projected levels;
- terms and conditions of allocations, individual awards and payments.
- audits the remuneration of the persons responsible for the independent control functions (Risk & Compliance).

The subjects discussed during the Remuneration Committee meetings are then presented to the Board of Directors for approval of the principles.

The Remuneration Committee met five times to deliberate on the remuneration process for the year 2018. More detailed information can be found in the Annual Report under "Corporate Governance Statement", "Governing bodies".

10.a.3. Permanent Control Committee (PCC)

A dedicated Permanent Control Committee (PCC) is organised. The PCC is organised at the different levels within the Bank: at the level of the Executive Committee, at the level of each business, depending on the employees reviewed.

The PCC is mandated to undertake an assessment of all MRTs, based on their contribution to the Bank's permanent control framework, their involvement with material risk and subsequent decisions, incidents that have occurred during the year and the corrective actions taken by the individual or as managers. The assessment can lead to an impact on variable remuneration.

The members of the PCC are the Head of RISK, Head of Compliance, Head of Legal and Head of HR (or their representatives).

The following employees are brought automatically at the PCC:

- employees who have registered breaches (compliance and/or other) in our administrative system;
- employees who didn't follow mandatory compliance and / or risk trainings;
- MRTs for whom the supervisor indicates minor/moderate or significant findings with regard to compliance with policies & procedures, and with sound risk management.

Further, the control functions, can add employees if deemed necessary. The PCC will discuss all files on an individual basis and take a decision on the score of the "Compliance & Risk" value.

10.a.4. Audit and controls

The operating procedures implementing the Bank's remuneration policy are documented to provide an effective audit trail of any decisions.

In addition, controls have been defined by Group Human Resources and implemented by the Bank's Human Resources in order to ensure the correct identification of the MRT employees and the correct application of all regulatory requirements applicable to this population (deferral rules, indexation, variable fixed ratio).

Moreover, the internal audit (Inspection Générale) performs an annual, independent ex post facto review of the remuneration process to ensure that it complies with the guidelines and procedures stipulated in the Bank's remuneration policy.

The review performed in 2018 by the internal audit team concerning the 2017 process, concluded, that the guidelines and regulations had been correctly applied. A summary of this review was brought to the attention of the Remuneration Committee.

10.b. BNP Paribas Fortis remuneration guidelines and policy for MRTs

10.b.1. Remuneration guidelines applicable to all employees of the Bank

Remuneration for the Bank's employees comprises a fixed component, a collective system and a variable component.

Fixed remuneration

Fixed salary rewards competence, experience, qualification level, as well as the level of involvement in assigned tasks. It is set on the basis of local and professional market conditions and the principle of internal consistency within the BNP Paribas Group. It is composed of a fixed base salary, which compensates the skills and responsibilities corresponding to the position held, and where appropriate, fixed pay supplements linked, in particular, to the specific characteristics of the position held, in accordance with applicable regulation.

Collective system

Belgian legislation allowed Belgian companies to ensure that employees can share in the profit of their group or company. The profit-sharing system was adopted by BNP Paribas Fortis in 2008. As of 1 January 2018, this system was replaced by the system of profit premiums. It enables employers to have their employees participate in the company's profit, in a tax and social security friendly way, without them participating in the capital of the company. BNP Paribas Fortis adapted its policy to the new legislation.

Alongside the system of profit premiums, BNP Paribas Fortis has introduced the provisions of the Collective Labour Agreement 90⁵, as from performance year 2012.

Variable remuneration

Variable remuneration rewards employees for their performance during the year based on the achievement of quantitative and qualitative targets that are measured through observed performance and individual assessments with regard to the fixed objectives. It takes into account the business line's results and the achievement of quantitative and qualitative targets, as well as contribution to risk management and respect of compliance rules and the local and/or professional market practices. It does not constitute a right and is set in a discretionary manner each year in accordance with the remuneration policy for the year in question and the governance principles.

In addition, variable remuneration may also consist of a medium- or long-term retention plan, or any other suitable instrument aimed at motivating and building the loyalty of the Group's key executives and high potential employees, by giving them an interest in the growth of the value created.

Variable remuneration is determined so as to avoid the introduction of incentives that could lead to conflicts of interest between employees and customers, or non-compliance with the rules of conduct, rules and regulations and risk management.

⁵ This CLA treats the 'non-recurring result-related benefits'
Pillar 3 disclosure

The fixed salary must represent a sufficiently high proportion of the total remuneration to reward employees for their work, seniority level, expertise and professional experience without necessarily having to pay a variable remuneration component.

Commercial incentives

For employees with a commercial function within the retail environment, individual variable compensation may take the form of commercial incentives. These incentives may not encourage to propose a product or service less adapted to the needs of the client than another more adapted product or service, or promote the interests of the employees or the Bank against the interests of the client.

Employee Benefits

Employee benefits are intended to protect employees against the uncertainties of life (via health, disability and life insurances, etc.), encourage their savings efforts and promote preparation for retirement, via collective pension schemes.

Other elements relating to the remuneration policy

An advance guarantee of payment of variable remuneration is prohibited. However, in the context of hiring, especially to attract a candidate with a key skill, the allocation of variable remuneration may be guaranteed on an exceptional basis the first year; this award shall in any event be subject to the same conditions as variable remuneration (i.e. with a deferred portion, indexing, and performance conditions where appropriate).

Hedging or insurance coverage by beneficiaries of risk related to share price fluctuation or the profitability of business lines, aimed at eliminating the uncertainties related to their deferred remuneration or during the vesting period, is prohibited.

Buyout awards to newly hired experienced executives will be paid according to a schedule and under conditions as equivalent as possible to the initial vesting dates and conditions of the repurchased instruments and in accordance with the payment and behavioural conditions stipulated in the framework of the BNP Paribas Fortis' deferred compensation plan in effect at the time of the buyout awards to these employees.

Any severance payment served to members of the Management Body and the regulated staff is in line with the provision of the Belgian Banking law of 25 April 2014.

The annual remuneration review process

Remuneration adjustments are managed through an annual process across the Bank and via a centralized system that enables Management to obtain at any time updated proposals within the Bank, particularly for all MRTs, and to oversee the process until individual decisions are taken and announced, based on the economic climate, the institution's results and market conditions.

The decisions are made within the framework of the BNP Paribas Group delegations.

10.b.2. Remuneration policy for MRTs

Scope

MRTs are identified according to criteria defined by the European Commission Delegated Regulation of 4 March 2014, the Belgian Banking law of 25 April 2014, and through additional criteria stipulated by the BNP Paribas Group, according to the following methodology:

1. At Bank level

- the Bank's governing body: executive and non-executive managers,
- the other members of the Bank's Executive Committee,
- the heads at Bank level of Finance, Human Resources, Remuneration Policy, Legal Affairs, Fiscal Affairs, IT, and Economic Analysis,
- within the Compliance and internal audit functions: the head at Bank level and the managers directly under this person,

- within the RISK function, the head at Bank level, the managers who directly report to this person, as well as the other Executive Committee members for this function,
- the managing heads of activities, retail banking operational entities and businesses whose activities have a material impact on the Bank's risk profile.

2. *At the level of the Bank's main business lines (key entities for which the Bank allocates more than 2% of its internal capital) :*

- the head and the managers directly under this person,
- the head of RISK and the managers directly under this person.

3. *By virtue of risk criteria*

- employees with delegations on credit that exceed certain thresholds (0.5 % of CET 1 (Common Equity Tier 1) of the Bank) and those with authority to approve or veto credit decisions,
- employees with the authority to initiate transactions of which the Value at Risk (VaR) exceeds certain thresholds (5% of VaR limit at Bank level) and those who have authority to approve or veto this type of transaction),
- members of committees with authority to accept or veto transactions, operations or new products,
- managers whose cumulated delegations for their direct employees exceed the threshold for credit risk.

4. *By virtue of the remuneration level*

Furthermore, the list also includes employees whose total annual remuneration for the preceding year exceeds certain absolute thresholds (EUR 500,000) or relative thresholds (within the 0.3% of best paid staff).

Determination of bonus pools and breakdown by business line

1. *The Individual Performance Plan (IPP)*

The IPP is applicable to managers in all business areas and contains one individual part tied to performance results and risk/risk management objectives. The bonus pool is a decision process based on the Bank's Net Promotor Score, business performance as well as risk performance.

2. *CIB Specific bonus pools*

In the context of strict oversight of remuneration for all Global Markets staff (Fixed Income, Global Equity & Commodities Derivatives activities, except Cash Equity), the variable remuneration pool for these business lines is determined on Group level by taking into account all components of earnings and risk, including:

- direct revenues;
- direct and indirect costs allocated to the business line;
- refinancing cost billed internally (including actual cost of liquidity);
- the cost of risk generated by the business line;
- the cost of capital allocated to the activity during the year.

However, some elements of revenues or costs are not allocated to the business line when they do not reflect its performance for the year.

The bonus pools thus calculated are distributed among the Global Markets business lines on the basis of clearly defined and documented criteria specific to each business line or team, which reflect:

- quantitative performance measurement (including the creation and development of long-term competitive advantages for the Group);
- the measurement of underlying risk;
- market value of the teams and the competitive situation.

These criteria are supplemented by factual elements that measure a team's collective behaviour in terms of:

- ongoing control, compliance and respect for procedures;

- team spirit within the business line and cross-selling within the Group.

The criteria used are based on quantitative indicators and factual elements, which are defined each year at the beginning of the remuneration review process.

3. The Bank's other business lines

The variable remuneration envelopes for the Bank's other business lines are set on the basis of the results generated by the activity (annual bonus pool), the market (local and/or métier) and achievements. Each year, the bonus pools are decided in the course of the budget process with the Finance Department and General Management and take into account direct input from Risk Management on the "cost of risk" (Risk-adjusted performance) or equivalent risk measures for the "pole" or "métier", depending on the scope of the budget. Bonus pools also take into account own funds requirements, the liquidity requirements or the probability and recurrence of the profits of the Bank.

4. Pools for support and control functions

Variable compensation pools for support functions and integrated control functions are determined independently of the performance of the business lines whose operations they validate or verify.

Individual awards

Individual allocations are based on:

- the performance of the team to which the individual belongs and his or her individual performance (performance is measured depending on the profit level and risk level linked to this profit),
- assessments (individual assessment performed by the line manager), which simultaneously evaluates:
 - qualitative achievements in relation to objectives set;
 - professional conduct with respect to the Group's values, compliance requirements and procedures;
 - contribution to risk management, including operational risk;
 - the person's managerial conduct where applicable.

Failure to comply with applicable rules and procedures or blatant breaches of compliance rules or Group code of conduct will lead to a reduction or cancellation of the variable remuneration, independently of any disciplinary proceedings.

The employees identified as MRT are formally assessed annually independently by control functions, against the Respect of Code of Conduct and Rules & Regulations and against the Risk Assessment & Management, as defined by the Bank. Failure to comply with at least one of these rules leads to a systematic reduction or cancellation of the variable remuneration of the year for the relevant employees.

Individual awards for employees of support functions and control functions are made in accordance with these principles and independently of the performance of the business lines controlled by the employees. Furthermore, particular emphasis is given to the employee's contribution to risk management during the annual assessment process.

Risk, conduct and compliance criteria are thus taken into account ex-ante in the process of determining pools (collective) and during the annual appraisal process (individual). Moreover, conduct and compliance are also taken into account ex-post for employees who benefit from variable compensation subject to deferral (malus and claw-back in case of misconduct).

All of these elements contribute to strengthen conduct, compliance and risk culture of all Bank staff members.

Payment of variable remuneration

For MRTs, variable remuneration includes a non-deferred portion and a deferred portion. The deferred portion increases depending on the level of the amount of variable remuneration, ranging from at least 40% to 60% for variable remuneration amounts of which the value exceeds EUR 200,000.

In accordance with regulatory requirements, variable remuneration (including both the deferred and non-deferred portions) is paid as follows:

- half in cash;
- half in cash indexed on the BNP Paribas share price, at the end of a retention period.

Indexing on the share price has a double purpose: to align the beneficiaries' interests with those of shareholders, and to ensure solidarity with the Bank's overall performance results.

For the members of the Executive Board, the Executive Committee and the Executive Leaders, the payment of bonuses is subject to a five year deferral period with the last payment in September 2024, i.e. five years and nine months after the reference year for determining the variable remuneration awards.

For all other MRTs, the payment of bonuses subject to deferral is spread over eight payment dates, with the last payment in September 2022, i.e. three years and nine months after the reference year for determining the variable remuneration awards.

The deferred portion vests progressively over the three/five years following the year of award, subject to achieving the business line, activity and Group financial performance targets and meeting the behavioural criteria set at the time of award.

Vesting of each annual portion is thus conditional upon the fulfilment of the conditions defined initially at the award date on each annual vesting date, based on the profitability level of the business line and/or activity, and/or the Group as a whole. These conditions are designed to promote an awareness of the impact that activities in a given year can have on results in subsequent years and to align individual conduct with the Bank's strategy and interests. If these conditions are not met during the course of a financial year, the annual deferred portion is lost (Malus).

Serious weaknesses in risk monitoring, management and management of compliance issues will be assessed by a dedicated committee, on the basis of:

- awareness of and respect of Risk procedures and policies (including but not limited to risk limits, monitoring/updating of such limits, ...);
- reporting and management of risk related incidents;
- risk-taking assessment incorporating stress-test parameters;
- behaviour that has caused or contributed to the need for a material restatement of the business unit's financial result;
- behaviour that causes or is reasonably expected to cause a substantial financial loss or any injury to the interest or business reputation of a business area, the bank or BNP Paribas;
- awareness and respect of Compliance and Operational Risk policies (including Financial Security, Protection of the Client Interests, Professional Ethics, Market Abuse, Outsourcing, Data Protection, Fraud prevention and Permanent Control, procedures governing the Exceptional Transaction Committee, New Activities Committee, Customer Acceptance Committee);
- reporting of compliance, regulatory, operational risk and other incidents that would harm the reputation of the bank or the BNP Paribas Group; and/or
- follow up on detected weaknesses in the internal control environment (including but not limited to recommendations from internal audit, permanent control, Compliance,...).

According to the application of the circular of the NBB of 10 November 2016, if the total value of variable remuneration is inferior or equal to EUR 75,000, the variable remuneration is paid at the award date.

For MRT regulated at the level of the Group, the proportionality principles of the Group apply.

Some MRTs are also beneficiaries of a fully deferred three-and-a-half- or five-and-a-half-year loyalty scheme in the form of a contingent capital instrument whose payment is subject to the absence of regulatory resolution measures and keeping the BNP Paribas Group's CET1 ratio above 7%. This plan also includes conditions relating to the financial

performance of BNP Paribas Group as well as Corporate Social Responsibility (CRS) criteria, defined at the time of allocation.

In case of dismissal for misconduct, (or for employees who left the Group, the misconduct that would have led to its dismissal, if it had been revealed while she/he was an employee) particularly when the employee's action involves the breach of risk control rules or of the compliance rules or in respect with the code of conduct, or also a dissimulation or an action that resulted in a distortion of the conditions under which variable remuneration previously allocated was set, all or part of the rights to the deferred parts of the previously allocated variable remuneration, including the allocations in a retention scheme, shall be lost and potentially any elements of variable remuneration already paid shall be recovered (subject to respect for local labour law).

Finally, the variable remuneration of employees working in capital market activities, not included in the category of MRTs, continues to be strictly controlled and subject to payment rules including deferral, indexation and payment conditions arrangements.

Fixed remuneration

Fixed remuneration for MRTs, as for other employees, is defined in relation to the employee's skills and experience and the local job market, among other criteria.

Ratio between variable and fixed remuneration

According to Belgian Banking law, the total allocated variable remuneration, at its notional value at award date, paid to an employee including in the MRT category is limited to the highest of 50% of his or her total fixed remuneration or EUR 50,000 gross.

For the purpose of calculating the ratio, a discount rate may be applied to the portion of variable compensation deferred for 5 years and paid in the form of instruments, up to a limit of 25% of total variable compensation. For performance year 2018, the discount rate wasn't applied.

Scope of application and local rules

The provisions described above are generally applicable to the Bank's MRTs. Special provisions, sometimes more restrictive in particular concerning payment conditions of variable remuneration or the ratio, may apply to MRTs in certain countries, due in part to the local transposition of CRD4 rules.

Directors and corporate officers

The variable remuneration of the Bank's directors and corporate officers is determined in compliance with the principles set out above applicable to all Bank's MRTs and in accordance with the terms and conditions proposed by the Remuneration Committee and adopted by BNP Paribas Fortis' Board of Directors. Specific remuneration principles and policy applicable to the Bank's directors and corporate officers are detailed in the Annual Report 2018.

10.b.3. Quantitative information on remuneration awarded to MRTs for the 2018 financial year

Aggregate overall data

1. Bank employees whose 2018 remuneration is subject to oversight rules

A total of 236 employees of the bank, have been identified as MRT's.

2. Remuneration of MRT employees in 2018

The quantitative information set out below concerns the remuneration awarded for the year 2018 to employees identified as MRTs at Bank level under CRD4 and the Belgian banking law, but does not reflect remuneration awarded to other employees whose remuneration is also subject to oversight.

Remuneration data for directors and corporate officers of BNP Paribas Fortis are included, in aggregate, in the quantitative information shown below. The table shown below includes the fair market value of the long-term compensation plan awarded to corporate officers.

Compensation awarded to MRTs for the financial year 2018 breakdown:

Excluding employer contributions <i>In euros</i>	31 December 2018			
	Number of people concerned	Amount of total compensation	Amount of fixed compensation	Amount of variable compensation awarded
Executive body - Non-executive Corporate officers	9	422.400	422.400	-
Executive body – Directors and corporate officers	6	4.795.003	3.494.437	1.300.567
Other MRTs	221	45.617.540	33.996.844	11.620.696
Total	236	50.834.943	37.491.281	12.921.263

The amount of variable remuneration paid in cash in April 2019 for financial year 2018 to 2018 MRT employees equals EUR 6.47million. The balance of variable remuneration (i.e. a theoretical amount of EUR 6.45 million), is spread out over several conditional payments for members of the Executive Board and Executive Committee between September 2019 and September 2024 and over several conditional payments between September 2019 and September 2022 for all other MRTs.

Other data within the 2018 regulated scope (in euros excluding employer contributions)

1. *Structure of the variable component of remuneration*

<i>In euros</i>	Vested amount paid or delivered	Conditional deferred amount*
Executive Body	321.280	979.287
Other regulated employees	6.266.139	5.354.557
Total	6.587.419	6.333.844

(*) spread out for deferred bonus, including EUR 1.75 million in September 2019

<i>In euros</i>	Payment in cash	Payment in shares or equivalent instruments
Executive Body	489.167	811.400
Other regulated employees	6.890.643	4.730.052
Total	7.379.810	5.541.452

2. *Unvested variable remuneration*

<i>In euros</i>	Amount of unvested deferred compensation for the year	Amount of unvested deferred compensation for previous years
Executive Body	979.287	1.762.872
Other regulated employees	5.354.557	8.792.848
Total	6.333.844	10.555.720

3. Deferred remuneration paid or reduced as a result of the year's performance

<i>In euros</i>	Amount of deferred compensation paid	Amount of reductions of deferred compensation
Executive Body	1,102,413	-
Other regulated employees	3,891,371	-
Total	4,993,784	-

4. Sums paid to new hires and terminations during the year

<i>'Sums paid' in euros</i>	Severance benefits paid and number of beneficiaries		Sums paid to new hires and number of beneficiaries	
	Sums paid	Number of beneficiaries	Sums paid	Number of beneficiaries
Executive Body	-	-	-	-
Other regulated employees	-	-	-	-

5. Severance benefit guarantees

<i>Amount in euros</i>	Severance benefit guarantees granted during the year	
	Total amount	Number of beneficiaries
Executive Body	-	-
Other regulated employees	-	-

<i>In euros</i>	Highest guarantee	
Executive Body	-	-
Other regulated employees	-	-

6. Number of MRT employees whose total remuneration for 2018 exceeded EUR 1 million

<i>Total compensation</i>	Number of MRTs for the year 2018
Between EUR 1million and EUR 1.5 million	1
Between EUR 1.5 million and EUR 2 million	1
Between EUR 2 million and EUR 2.5 million	-
Between EUR 2.5 million and EUR 3 million	-
Between EUR 3 million and EUR 3.5 million	-
Between EUR 3.5 million and EUR 4 million	-
Between EUR 4 million and EUR 4.5 million	-
Between EUR 4.5 million and EUR 5 million	-

Abbreviations

ABS	Asset Backed Securities	IMA	Internal Model Approach
AC	Audit Committee	IMM	Internal Model Method
ACPR	Autorité de contrôle prudentiel et de résolution (the French supervisor)	IPP	Individual Performance Plan
AIRB	Advanced Internal Rating Based	IRB	Internal Rating Based
AIRBA	Advanced Internal Rating Based Approach	IRB	International Retail Banking
ALCo	Asset and Liability Committee	IRBA	Internal Rating Based Approach
ALMT	Asset & Liability Management Treasury	IRC	Incremental Risk Charge
AMA	Advanced Measurement Approach (Operational Risk)	ISDA	International Swaps and Derivatives Association
ARCC	Audit, Risk and Compliance Committee	LBO	Leverage Buy Out
AVA	Additional Valuation Adjustments	LGD	Loss Given Default
BIA	Basic Indicator Approach (Operational Risk)	MBS	Mortgage Backed Securities
CBFA	Commissie voor het Bank-, Financie- en Assurantiewezen	MCLAR	Market, Counterparty and Liquidity Analysis and Reporting
CCF	Credit Conversion Factor	MRTs	Material Risk Takers
CCP	Central Clearing Counterparty	MTNs	Medium Term Notes
CCR	Counterparty Credit Risk	NBB	National Bank of Belgium
CDS	Credit Default Swaps	ORC	Operational Risk & Control
CEO	Chief Executive Officer	OTC	Over-the-counter
CET1	Common Equity Tier 1	P&L	Profit & Loss
CIB	Corporate and Investment Banking	PCC	Permanent Control Committee
CLO	Collateralised Loan Obligation	PD	Probability of Default
CMRC	Capital Markets Risk Committee (Market Risk)	PFC	Financial Control Committee (Market Risk)
COO	Chief Operating Officer	PFE	Potential Future Exposure
CPBB	Corporate & Public Banking Belgium	PIs	Potential Incidents (Operational Risk)
CRD IV	Capital Requirements Directive	PVA	Prudent Valuation Adjustments
CRIF	Compliance, Risk and Finance Committee	QCCP	Qualifying Central Clearing Counterparty
CRM	Credit Risk Mitigation	RC	Risk Committee
CRO	Chief Risk Officer	RMBS	Residential Mortgage Backed Securities
CRR	Capital Requirements Regulation	RPBB	Retail & Private Banking Belgium
CVA	Credit Value Adjustment	RTS	Regulatory Technical Standards
EAD	Exposure at Default	RWA	Risk Weighted Assets
EBA	European Banking Association	SFA	Supervisory Formula Approach
ECB	European Central Bank	SFT	Security Finance Transactions
EEPE	Effective Expected Positive Exposure	SME	Small and Medium sized Enterprises
EPE	Expected Positive Exposure	SPV	Special Purpose Vehicle
ERA	Enterprise Risk Architecture	SREP	Supervisory Review and Evaluation Process
GDP	Gross Domestic Product	STSC	Stress Testing Steering Committee (Capital Markets)
GM	Global Markets	SVaR	Stressed Value at Risk
GWWR	General Wrong Way Risk	SWWR	Specific Wrong Way Risk
HQLA	High-Quality Liquid Assets	TEB	Türk Ekonomi Bankası (BNP Paribas Fortis' Subsidiary in Turkey)
IAA	Internal Assessment Approach	USTA	Unrated Standardised Approach
IAS	International Accounting Standards	V&RC	Valuation & Risk Control (department)
ICAAP	Internal Capital Adequacy Assessment Process	VaR	Value at Risk
ICC	Internal Control Committees	VMC	Valuation Methodology Committee (Market Risk)
IFRS	International Financial Reporting Standards	VRC	Valuation Review Committee (Market Risk)

Appendix: additional pillar 3 disclosure

An additional quantitative pillar 3 disclosure is published in a separate document on our website.

This document contains following templates:

Capital Adequacy

- 1 Geographical consolidation distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

Credit risk

- 2 Exposure to credit risk by asset class
- 3 RBA exposure by PD scale and asset class – sovereign, financial institution, corporate and specialised financing portfolios
- 4 Standardised Credit EaD by risk weight
- 5 Defaulted Exposures and provisions by asset class
- 6 Defaulted exposures and provisions by industry
- 7 Defaulted exposures and provisions by geographical breakdown
- 8 Standardised credit risk exposures by standard exposure class

Counterparty credit risk

- 9 IRBA Bilateral Counterparty Credit Risk Exposures
- 10 Standardised bilateral counterparty credit risk exposures