BNP PARIBAS
CORPORATE & INSTITUTIONAL BANKING

BASE LISTING DOCUMENT DATED 3 APRIL 2019

If you are in any doubt about any of the contents of this document, you should obtain independent professional advice.

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Non-collateralised Structured Products Base Listing Document relating to Structured Products to be issued by BNP Paribas Issuance B.V.

(Incorporated in the Netherlands with its statutory seat in Amsterdam)

unconditionally and irrevocably guaranteed by BNP Paribas

(incorporated in France)

This document, for which we and BNP Paribas (the "**Guarantor**") accept full responsibility, includes particulars given in compliance with the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**Listing Rules**") for the purpose of giving information with regard to us, the Guarantor and our warrants (the "**Warrants**"), callable bull/bear contracts ("**CBBCs**") and other structured products (together, the "**Structured Products**") to be listed on the Stock Exchange from time to time. This document may be updated and/or amended from time to time by way of addenda. You must ask us if any addenda to this document have been issued.

Our obligations under the Structured Products are guaranteed by the Guarantor under a guarantee executed by the Guarantor dated as of 3 April 2019 (the "**Guarantee**"). We and the Guarantor, having made all reasonable enquiries, confirm that to the best of our knowledge and belief the information contained in this document is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement herein or this document misleading.

These are Structured Products involving derivatives. You should not invest in the Structured Products unless you fully understand and are willing to assume the risks associated with them.

The Structured Products are complex products. You should exercise caution in relation to them. Investors are warned that the price of the Structured Products may fall in value as rapidly as it may rise and holders may sustain a total loss of their investment. Prospective purchasers should therefore ensure that they understand the nature of the Structured Products and carefully study the risk factors set out in this document and, where necessary, seek professional advice, before they invest in the Structured Products.

The Structured Products constitute our general unsecured contractual obligations and of no other person, and the Guarantee in respect of the Structured Products constitutes the general unsecured contractual obligations of the Guarantor and of no other person. The Structured Products will rank equally among themselves and with all our other unsecured obligations and all other unsecured obligations of the Guarantor (save for those obligations preferred by law) upon liquidation. If you purchase the Structured Products, you are relying upon our creditworthiness and the creditworthiness of the Guarantor and have no rights under the Structured Products against (a) the company which has issued the underlying securities; (b) the trustee or the manager of the underlying unit trust; or (c) the index compiler of any underlying index. If we become insolvent or default on our obligations under the Structured Products or the Guarantor becomes insolvent or defaults on its obligations under the Guarantee, you may not be able to recover all or even part of the amount due under the Structured Products (if any). The Guarantor is subject to the exercise of the bail-in powers under the French legislation for implementation of the Bank Recovery and Resolution Directive.

Sponsor

BNP Paribas Securities (Asia) Limited

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IMPORTANT INFORMATION

You should carefully study the risk factors set out in this document and the Listing Documents

What is this document about?

This document is for information purposes only and does not constitute an offer, an advertisement or invitation to the public to subscribe for or to acquire any Structured Products.

What documents should you read before investing in the Structured Products?

A launch announcement and supplemental listing document of each series of Structured Products will set out the detailed commercial terms of the relevant series. You must read this document (including any addendum to this document to be issued from time to time) together with such launch announcement and supplemental listing document (including any addendum to such launch announcement and supplemental listing document to be issued from time to time) (together, the "**Listing Documents**") before investing in any Structured Products. You should carefully study the risk factors set out in the Listing Documents.

Is there any guarantee or collateral for the Structured Products?

Our obligations under the Structured Products are unconditionally and irrevocably guaranteed by the Guarantor. If we become insolvent or default on our obligations under the Structured Products and the Guarantor becomes insolvent or defaults on its obligations under the Guarantee, you can only claim as an unsecured creditor of the Issuer and the Guarantor. In such event, you may not be able to recover all or even part of the amount due under the Structured Products (if any).

What are our and the Guarantor's credit ratings?

The Issuer's long term credit ratings as of 2 April 2019 is:

Rating agency	***Rating***
S&P Global Ratings ("**S&P**")	A (positive outlook)

Our Guarantor's long term credit ratings as of 2 April 2019 are:

Rating agency	***Rating***
Moody's Investors Service, Inc. ("**Moody's**")	Aa3 (stable outlook)
S&P	A (positive outlook)
Fitch France S.A.S. ("**Fitch**")	A+ (stable outlook)

The credit ratings are only an assessment by the rating agencies of the Issuer's and the Guarantor's overall financial capacity to pay its debts respectively.

A is among the top three major credit rating categories and is the sixth highest investment-grade ranking of the ten investment-grade ratings (including + or – sub-grades) assigned by S&P.

Aa3 is among the top three major credit rating categories and is the fourth highest investment-grade ranking of the ten investment-grade ratings (including 1, 2 and 3 sub-grades) assigned by Moody's.

A+ is among the top three major credit rating categories and is the fifth highest investment-grade ranking of the ten investment-grade ratings (including + or – sub-grades) assigned by Fitch.

Please refer to the brief guide in Appendix 4 to this document to what such credit ratings mean.

Rating agencies usually receive a fee from the companies that they rate. When evaluating our and the Guarantor's creditworthiness, you should not solely rely on our and the Guarantor's credit ratings because:

- a credit rating is not a recommendation to buy, sell or hold the Structured Products;
- credit ratings of companies may involve difficult-to-quantify factors such as market competition, the success or failure of new products and markets and managerial competence;
- a high credit rating is not necessarily indicative of low risk. Our and the Guarantor's credit ratings as of the above date are for reference only and may be subject to change thereafter. You may visit *www.bnpparibas.com* to obtain information about the credit ratings of us and the Guarantor. Any downgrading of our and the Guarantor's credit ratings could result in a reduction in the value of the Structured Products;

- a credit rating is not an indication of the liquidity or volatility of the Structured Products; and

- a credit rating may be downgraded if the credit quality of the Issuer and/or the Guarantor declines.

The Structured Products are not rated.

Our and the Guarantor's credit ratings are subject to change or withdrawal at any time within each rating agency's sole discretion. You should conduct your own research using publicly available sources to obtain the latest information with respect to our and the Guarantor's credit ratings from time to time.

Is the Issuer or the Guarantor regulated by the Hong Kong Monetary Authority referred to in Rule 15A.13(2) or the Securities and Futures Commission referred to in Rule 15A.13(3)?

The Issuer is not regulated by the Hong Kong Monetary Authority referred to in Rule 15A.13(2) or the Securities and Futures Commission referred to in Rule 15A.13(3). The Hong Kong branch of the Guarantor is regulated by the Hong Kong Monetary Authority. The Guarantor is also regulated by Comité des Etablissements de Crédit et des Entreprises d'Investissement.

Is the Issuer or the Guarantor subject to any litigation?

Save as disclosed in this document, the Issuer, the Guarantor and their respective subsidiaries ("**BNP Group**") are not aware of any litigation or claims of material importance pending or threatened against any of them.

Authorisation for the issue of the Structured Products

The issue of the Structured Products was authorised by our board of directors on 29 May 2018.

Has the Guarantor's financial position changed since last financial year-end?

Save as disclosed in Appendix 5 of this document, there has been no material adverse change in the Guarantor's financial or trading position since 31 December 2018.

Do you need to pay any transaction cost?

The Stock Exchange charges a trading fee of 0.005 per cent. and the Securities and Futures Commission ("**SFC**") charges a transaction levy of 0.0027 per cent. in respect of each transaction effected on the Stock Exchange payable by each of the seller and the buyer and calculated on the value of the consideration for the Structured Products. The levy for the investor compensation fund is currently suspended.

Do you need to pay any tax?

You may be required to pay stamp duties, taxes and other charges in accordance with the laws and practices of the country of your purchase in addition to the issue price of each Structured Product. See the section headed "Taxation" for further information.

Placing, sale and grey market dealings

No action has been or will be taken by us that would permit a public offering of any series of Structured Products or possession or distribution of any offering material in relation to any Structured Products in any jurisdiction (other than Hong Kong) where action for the purpose is required. No offers, sales, re-sales, transfers or deliveries of any Structured Products, or distribution of any offering material relating to the Structured Products may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws or regulations and which will not impose any obligation on us or the Guarantor. See the section headed "Placing and Sale" for further information.

Following the launch of a series of Structured Products, we may place all or part of that series with our related party. The Structured Products may be sold to investors in the grey market in the period between the launch date and the listing date. We will report any dealings in Structured Products by any member of the BNP Group in the grey market to the Stock Exchange on the listing date through the website of the HKEX at *http://www.hkex.com.hk/?sc_lang=en*.

Where can you inspect the relevant documents?

The following documents are available for inspection during usual business hours on any weekday (except public holidays) at BNP Paribas Securities (Asia) Limited, 59th-63th Floors, Two International Finance Centre, 8 Finance Street, Central, Hong Kong:

(a) our latest audited financial statements and any interim or quarterly financial statements and the latest audited financial statements and any interim or quarterly financial statements of the Guarantor;

(b) the consent letter of the Guarantor's auditors, Deloitte & Associés, PricewaterhouseCoopers Audit and Mazars (the "**Auditors**");

(c) this document and any addendum to this document;

(d) the launch announcement and supplemental listing document as long as the relevant series of Structured Products is listed on the Stock Exchange;

(e) the instrument executed by us on 3 May 2006 which constitutes the Structured Products; and

(f) the Guarantee.

Requests for photocopies of the above documents will be subject to a reasonable fee which reflects the costs of making such copies.

The Listing Documents are also available on the website of the HKEX at *http://www.hkexnews.hk* and our website at *http://www.bnppwarrant.com.hk*.

各上市文件亦可於香港交易所網站 (*http://www.hkexnews.hk*) 及我們的網站 (*http://www.bnppwarrant.com.hk*) 瀏覽。

Please refer to (i) the base listing document dated 3 April 2018 ("**2018 BLD**") for the Guarantor's Consolidated Financial Statements for the year ended 31 December 2017 and the Statutory Auditors' report on such consolidated financial statements; and (ii) the addendum to the 2018 BLD dated 27 April 2018 for the Issuer's annual financial statements for the year ended 31 December 2017 and the independent auditor's report on such financial statements.

Have the Auditors consented to the inclusion of their report in this document?

As at the date of this document, the Guarantor's Auditors have given and have not withdrawn their written consent to the inclusion of their report dated 5 March 2019 on the consolidated financial statements of the Guarantor for the year ended 31 December 2018 in this document and/or the references to their names in the Listing Documents, in the form and context in which they are included. Their report was not prepared for incorporation into this document.

The Auditors do not hold the Guarantor's shares or shares in its subsidiaries, nor do they have the right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for the Guarantor's securities or securities of any of its subsidiaries.

How can you get further information about BNP Paribas?

You may visit our website at *www.bnpparibas.com* to obtain further information about us and/or the Guarantor.

You must note that the information on our website will be of a general nature and cannot be relied upon as accurate and/or correct and will not have been prepared exclusively for the purposes of any particular financial instrument issued by us, including the Structured Products.

Authorised representatives

Alvin C Chan of 7/F Lincoln House, Taikoo Place, 979 King's Road, Quarry Bay, Hong Kong and Edmond Kwok of 60th Floor, Two International Finance Centre, 8 Finance Street, Central, Hong Kong, are our authorised representatives and are authorised to accept services on our behalf in Hong Kong.

Governing law of the Structured Products

All contractual documentation for the Structured Products will be governed by, and construed in accordance with, the laws of Hong Kong.

The Listing Documents are not the sole basis for making an investment decision

The Listing Documents do not take into account your investment objectives, financial situation or particular needs. Nothing in the Listing Documents should be construed as a recommendation by us, the Guarantor or our respective affiliates to invest in the Structured Products or the underlying asset of the Structured Products.

No person has been authorised to give any information or to make any representations other than those contained in this document in connection with the Structured Products, and, if given or made, such information or representations must not be relied upon as having been authorised by us or the Guarantor.

The Stock Exchange and HKSCC have made no assessment of, nor taken any responsibility for, our financial soundness or the merits of investing in any Structured Products, nor have they verified the accuracy or the truthfulness of statements made or opinions expressed in this document.

This document has not been reviewed by the Securities and Futures Commission. You are advised to exercise caution in relation to the offer of the Structured Products.

Capitalised terms

Unless otherwise specified, capitalised terms used in this document have the meanings set out in the General Conditions set out in Appendix 1 and the Product Conditions applicable to the relevant series of Structured Products set out in Appendices 2 and 3 respectively (together, the "**Conditions**").

OVERVIEW OF WARRANTS

What is a derivative warrant?

A derivative warrant linked to a share, an unit, a commodity, a commodity future, an index, a currency pair or other assets (each an "**Underlying Asset**") is an instrument which gives the holder a right to "buy" or "sell" an Underlying Asset at, or derives its value by reference to, a pre-set price/level/exchange rate called the Exercise Price/Strike Price/Strike Level/Strike Rate on the Expiry Date. It usually costs a fraction of the value of the Underlying Asset.

A derivative warrant may provide leveraged return to you (but conversely, it could also magnify your losses).

How and when can you get back your investment?

Our Warrants are European Style warrants. This means they can only be exercised on the Expiry Date.

A Warrant will, upon exercise on the Expiry Date, entitle you to a cash amount called the "**Cash Settlement Amount**" (net of any Exercise Expenses) (if positive) according to the applicable Conditions.

You will receive the Cash Settlement Amount less any Exercise Expenses upon settlement at expiry. If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable to you and you will lose your entire investment.

How do our Warrants work?

Ordinary Warrants

The potential payoff upon expiry or exercise of the Warrants is calculated by us by reference to the difference between:

(a) for a Warrant linked to a security, commodity or commodity future, the Exercise Price/Strike Price and Closing Price/Average Price;

(b) for a Warrant linked to an index, the Strike Level and the Closing Level; and

(c) for a Warrant linked to a currency pair, the Strike Rate and the Spot Rate.

Call Warrants

A call Warrant is suitable to you if you hold a bullish view on the price/level/exchange rate of the Underlying Asset during the term of that call Warrant.

A call Warrant will be exercised if the Average Price/Closing Price/Closing Level/Spot Rate is greater than Exercise Price/Strike Price/Strike Level/Strike Rate (as the case may be). The more the Average Price/Closing Price/Closing Level/Spot Rate exceeds the Exercise Price/Strike Price/Strike Level/Strike Rate (as the case may be), the higher the payoff upon expiry or exercise. If the Average Price/Closing Price/Closing Level/Spot Rate is at or below the Exercise Price/Strike Price/Strike Level/Strike Rate (as the case may be), you will lose all your investment.

Put Warrants

A put Warrant is suitable to you if you hold a bearish view on the price/level/exchange rate of the Underlying Asset during the term of that put Warrant.

A put Warrant will be exercised if the Average Price/Closing Price/Closing Level/Spot Rate is below the Exercise Price/Strike Price/Strike Level/Strike Rate (as the case may be). The more the Average Price/Closing Price/Closing Level/Spot Rate is below the Exercise Price/Strike Price/Strike Level/Strike Rate (as the case may be), the higher the payoff upon expiry or exercise. If the Exercise Price/Strike Price/Strike Level/Strike Rate is at or below the Average Price/Closing Price/Closing Level/Spot Rate (as the case may be), you will lose all your investment.

Other types of warrants

The launch announcement and supplemental listing document applicable to other types of Warrants will specify the type of such Warrants and whether such Warrants are exotic Warrants.

Where can you find the Product Conditions applicable to our Warrants?

You should review the Product Conditions applicable to each type of the Warrants before your investment.

The Product Conditions applicable to each type of our Warrants are set out in Parts A to F of Appendix 2 (as may be supplemented by any addendum and/or the relevant launch announcement and supplemental listing document).

What are the factors determining the price of a derivative warrant?

The price of a Warrant generally depends on the prevailing price/level/exchange rate of the Underlying Asset. However, throughout the term of a Warrant, its price/level/exchange rate will be influenced by one or more of the following factors, including:

(a) the Exercise Price/Strike Price/Strike Level/Strike Rate applicable to that Warrant;

(b) the value and volatility of the price/level/exchange rate of the Underlying Asset (being a measure of the fluctuation in the price/level/exchange rate of the Underlying Asset);

(c) the time remaining to expiry: generally, the longer the remaining life of the Warrant, the greater its value;

(d) interest rates;

(e) expected dividend payments or other distributions (if any) on the Underlying Asset or on any components comprising the underlying index;

(f) the liquidity of the Underlying Asset or of the futures contracts relating to the underlying index;

(g) the supply and demand for the Warrant;

(h) our related transaction costs; and

(i) our creditworthiness and the creditworthiness of the Guarantor.

What is your maximum loss?

Your maximum loss in our Warrants will be your entire investment amount plus any transaction costs.

How can you get information about the Warrants after issue?

You may visit the HKEX's website at *http://www.hkex.com.hk/products/securities/derivative-warrants?sc_lang=en* or our website at *http://www.bnppwarrant.com.hk* to obtain further information on derivative warrants or any notice given by us or the Stock Exchange in relation to our Warrants.

OVERVIEW OF CBBCS

What are CBBCs?

CBBCs are a type of Structured Products that track the performance of an Underlying Asset. CBBCs can be issued on different types of Underlying Assets as prescribed by the Stock Exchange from time to time, including:

(a) securities listed on the Stock Exchange;

(b) Hang Seng Index, Hang Seng China Enterprises Index and Hang Seng China H-Financials Index; and/or

(c) overseas securities, overseas indices, currencies, commodities (such as oil, gold and platinum), commodity futures or other assets as prescribed by the Stock Exchange from time to time.

A list of eligible Underlying Assets for CBBCs is available on the website of the HKEX at *https://www.hkex.com.hk/Products/Securities/Callable-Bull-Bear-Contracts/CBBC-Eligible-Underlying-Assets/Eligible-Single-Hong-Kong-Stocks-for-CBBC-Issuance-in-Current-Quarter?sc_lang=en*.

CBBCs are issued either as callable bull contracts ("**bull CBBCs**") or callable bear contracts ("**bear CBBCs**"), allowing you to take either bullish or bearish positions on the Underlying Asset.

Bull CBBCs are designed for investors who have an optimistic view on the Underlying Asset. Bear CBBCs are designed for investors who have a pessimistic view on the Underlying Asset.

CBBCs have a mandatory call feature (the "**Mandatory Call Event**") and, subject to the limited circumstances set out in the relevant Conditions in which a Mandatory Call Event may be reversed, we must terminate our CBBCs upon the occurrence of a Mandatory Call Event. See "What are the mandatory call feature of CBBCs?" below.

There are 2 categories of CBBCs, namely:

(a) Category R CBBCs; and

(b) Category N CBBCs.

Your entitlement following the occurrence of a Mandatory Call Event will depend on the category of the CBBCs.

If no Mandatory Call Event occurs, the CBBCs will be exercised automatically on the Expiry Date by payment of a Cash Settlement Amount (if any). The Cash Settlement Amount (if any) payable at expiry represents the difference between the Closing Price/Closing Level of the Underlying Asset on the Valuation Date and the Strike Price/Strike Level.

The Conditions applicable to CBBCs are set out in Parts A, B and C of Appendix 3 (as may be supplemented by any addendum or the relevant launch announcement and supplemental listing document).

What are the mandatory call feature of CBBCs?

Mandatory Call Event

Subject to the limited circumstances set out in the relevant Conditions in which a Mandatory Call Event may be reversed, we must terminate the CBBCs if a Mandatory Call Event occurs. A Mandatory Call Event occurs if the Spot Price/Spot Level of the Underlying Asset is:

(a) at or below the Call Price/Call Level (in the case of a series of bull CBBCs); or

(b) at or above the Call Price/Call Level (in the case of a series of bear CBBCs),

at any time during the Observation Period.

The Observation Period starts from and including the Observation Commencement Date of the relevant CBBCs and ends on and including the Trading Day immediately preceding the Expiry Date.

Subject to the limited circumstances set out in the relevant Conditions in which a Mandatory Call Event may be reversed and such modification and amendment as may be prescribed by the Stock Exchange from time to time:

(a) all trades in the CBBCs concluded via auto-matching or manually after the time of the occurrence of a Mandatory Call Event; and

(b) where the Mandatory Call Event occurs during a pre-opening session or closing auction session (if applicable), all auction trades in the CBBCs concluded in such session and all manual trades concluded after the end of the pre-order matching period in such session, will be invalid and cancelled, and will not be recognised by us or the Stock Exchange.

The time at which a Mandatory Call Event occurs will be determined by reference to:

(a) in respect of CBBCs over single equities ("**Single Equity CBBCs**") or CBBCs over single unit trust ("**Single Unit Trust CBBCs**"), the Stock Exchange's automatic order matching and execution system time at which the Spot

Price is at or below the Call Price (for a series of bull CBBCs) or is at or above the Call Price (for a series of bear CBBCs); or

(b) in respect of CBBCs over index ("**Index CBBCs**"), the time the relevant Spot Level is published by the index compiler at which the Spot Level is at or below the Call Level (for a series of bull CBBCs) or is at or above the Call Level (for a series of bear CBBCs),

subject to the rules and requirements as prescribed by the Stock Exchange from time to time.

Category R CBBCs vs. Category N CBBCs

The launch announcement and supplemental listing document for the relevant series of CBBCs will specify whether the CBBCs are Category R CBBCs or Category N CBBCs.

"**Category N CBBCs**" refer to CBBCs for which the Call Price/Call Level is equal to their Strike Price/Strike Level. In respect of a series of Category N CBBCs, you will not receive any cash payment following the occurrence of a Mandatory Call Event.

"**Category R CBBCs**" refer to CBBCs for which the Call Price/Call Level is different from their Strike Price/Strike Level. In respect of a series of Category R CBBCs, you may receive a cash payment called the "**Residual Value**" (net of any Exercise Expenses) upon the occurrence of a Mandatory Call Event. The amount of the Residual Value payable (if any) is calculated by reference to:

(a) in respect of a series of bull CBBCs, the difference between the Minimum Trade Price/Minimum Index Level and the Strike Price/Strike Level of the Underlying Asset; and

(b) in respect of a series of bear CBBCs, the difference between the Strike Price/Strike Level and the Maximum Trade Price/Maximum Index Level of the Underlying Asset.

You must read the applicable Product Conditions and the relevant launch announcement and supplemental listing document to obtain further information on the calculation formula of the Residual Value applicable to Category R CBBCs.

You may lose all of your investment in a particular series of CBBCs if:

(a) in the case of a series of bull CBBCs, the Minimum Trade Price/Minimum Index Level of the Underlying Asset is equal to or less than the Strike Price/Strike Level; or

(b) in the case of a series of bear CBBCs, the Maximum Trade Price/Maximum Index Level of the Underlying Asset is equal to or greater than the Strike Price/Strike Level.

Where can you find the Product Conditions applicable to our CBBCs?

You should review the Product Conditions applicable to each type of the CBBCs before your investment.

The Product Conditions applicable to each type of our CBBCs are set out in Appendix 3.

How is the funding cost calculated?

The issue price of a series of CBBCs is set by reference to (i) the difference between the initial reference spot price/level of the Underlying Asset as at the launch date of the CBBC and the Strike Price/Strike Level, plus (ii) if applicable, a funding cost.

The initial funding cost applicable to the CBBCs as of the launch date will be specified in the relevant launch announcement and supplemental listing document for the relevant series.

The funding cost is an amount determined by us based on a number of factors, including but not limited to the Strike Price/Strike Level, the prevailing interest rate and, for Single Equity CBBCs or Single Unit Trust CBBCs, the expected dividend/distribution yield in respect of the Underlying Asset.

The funding cost may fluctuate throughout the life of the CBBCs as the funding rate changes from time to time.

Further details about the funding cost applicable to a series of CBBCs will be described in the relevant launch announcement and supplemental listing document.

Do you own the Underlying Asset?

CBBCs convey no interest in the Underlying Asset. We may choose not to hold the Underlying Asset or any derivatives contracts linked to the Underlying Asset. There is no restriction through the issue of the CBBCs on the ability of the BNP Group to sell, pledge or otherwise convey all rights, titles and interests in any Underlying Asset or any derivatives products linked to the Underlying Asset.

What are the factors determining the price of a CBBC?

The price of a series of CBBCs tend to mirror the movement in the value of the Underlying Asset in dollar value (on the assumption of an entitlement ratio of one CBBC to one unit of Underlying Asset).

However, throughout the term of a CBBC, its price will be influenced by a number of factors, including:

(a) the Strike Price/Strike Level and the Call Price/ Call Level;

(b) the likelihood of the occurrence of a Mandatory Call Event;

(c) for Category R CBBCs only, the probable range of the Residual Value payable upon the occurrence of a Mandatory Call Event;

(d) the time remaining to expiry;

(e) any change(s) in interim interest rates;

(f) expected dividend payments or other distribution on the Underlying Asset or on any components comprising the underlying index;

(g) the probable range of the Cash Settlement Amount;

(h) the supply and demand for the CBBCs;

(i) the liquidity of the Underlying Asset or of the future contracts relating to the underlying index;

(j) our related transaction costs; and/or

(k) our creditworthiness and the creditworthiness of the Guarantor.

What is your maximum loss?

Your maximum loss in CBBCs will be your entire investment amount plus any transaction cost.

How can you get information about the CBBCs after issue?

You may visit the HKEX's website at *http://www.hkex.com.hk/Products/Securities/Callable-Bull-Bear-Contracts?sc_lang=en* or our website at *http://www.bnppwarrant.com.hk* to obtain further information on CBBCs or any notice given by us or the Stock Exchange in relation to our CBBCs.

OVERVIEW OF THE BRRD AND ITS IMPLICATIONS TO THE STRUCTURED PRODUCTS

What is the BRRD?

The Bank Recovery and Resolution Directive (2014/59/EU) ("**BRRD**") is a legislative development in the European Union ("**EU**") which was introduced to address the shortcomings in the national laws and regulations of EU Member States for the resolution of failing banks and financial institutions. The BRRD provides that it should be applied by EU Member States from 1 January 2015, except for the Bail-In Power (as described below) which should be applied from 1 January 2016. The implementation date of the BRRD in each EU Member State depends on the implementation legislation enacted, or which will be enacted in each such EU Member State. The BRRD has been implemented in France. In March 2016, the European Commission has adopted a Commission Delegated Regulation setting out a number of regulatory technical standards for the BRRD.

The BRRD provides for the establishment of an EU-wide framework for the recovery and resolution of EU credit institutions and investment firms as well as certain of their group companies falling under the scope of the BRRD. The BRRD requires the governments of all EU Member States to provide their relevant resolution authorities with a set of tools to intervene sufficiently early and quickly in an unsound or failing institution so as to ensure the continuity of that institution's critical financial and economic functions, while minimising the impact of that institution's failure on the broader economy and financial system.

The BRRD contains four resolution tools and powers (the "**Resolution Tools**") which may be used alone or in combination where the relevant resolution authority considers that (a) an affected institution is failing or likely to fail, (b) there is no reasonable prospect that any alternative private sector measures would prevent the failure of such affected institution within a reasonable timeframe, and (c) a resolution action is in the public interest: (i) sale of business – which enables the relevant resolution authorities to direct the sale of the affected institution or the whole or part of its business on commercial terms; (ii) bridge institution – which enables the relevant resolution authorities to transfer all or part of the business of the affected institution to a "bridge institution" (an entity created for this purpose that is wholly or partially in public control); (iii) asset separation – which enables the relevant resolution authorities to transfer impaired or problem assets to one or more publicly owned asset management vehicles to allow them to be managed with a view to maximising their value through eventual sale or orderly wind-down (this can be used together with another resolution tool only); and (iv) Bail-In Power (as described in the paragraph headed "What is Bail-In Power" below).

It is important to note that certain protections are granted to the creditors of an EU credit institution in case of the exercise of the Resolution Tools (including the Bail-In Power) over such institution. The most important one is the principle known as the "no creditor worse off principle" as provided for in the BRRD. This principle is intended to ensure that the creditors of an affected institution which is subject to the exercise of the Bail-In Power under the BRRD shall not incur greater losses than they would have incurred if such affected institution had been wound up under normal insolvency proceedings. For this purpose, the relevant resolution authorities in the EU have to ensure that it is assessed at the time of exercise of the Bail-In Power whether shareholders and creditors of an affected institution would have received better treatment if such affected institution had entered into normal insolvency proceedings.

The Issuer is not subject to the BRRD

The Issuer is incorporated as a private limited company under Dutch law as an exempt group finance company under the Dutch Financial Supervision Act, and will not be subject to the BRRD.

The Guarantor is subject to the BRRD

The Guarantor is a credit institution incorporated in France and is subject to French legislation implementing the BRRD.

Under French legislation implementing the BRRD, substantial powers are granted to the *Autorité de contrôle prudentiel et de résolution* ("**ACPR**"), the French resolution authority, and/or to other relevant resolution authorities in the EU, to implement resolution measures (including the use of the Resolution Tools) in respect of a French credit institution (including, for example, the Guarantor) and certain of its affiliates to protect and enhance the stability of the financial system of France if the relevant resolution authorities consider the failure of the relevant entity has become likely and certain other conditions are satisfied.

The Resolution Tools may be exercised over the Guarantor

The exercise of any Resolution Tool or any suggestion of any such exercise under the BRRD over the Guarantor could adversely affect the value of the Structured Products. **You may therefore lose all or a substantial part of your investment in the Structured Products.**

In addition, the resolution powers could be exercised (i) prior to the commencement of any insolvency proceedings in respect of the Guarantor, and (ii) by the relevant resolution authority without your consent or any prior notice to you. It is also uncertain how the relevant resolution authority would assess triggering conditions in different pre-insolvency scenarios affecting the Guarantor under the BRRD. Accordingly, you may not be able to anticipate a potential exercise of any such resolution powers over the Guarantor.

What is "Bail-In Power"?

"Bail-In Power" (as defined in the section headed "Text of the Guarantee of BNP Paribas") means the power of the relevant resolution authorities to write down or convert to equity certain claims of unsecured creditors of a failing institution existing from time to time under, and exercised in compliance with, any laws, regulations, rules or requirements in effect in France, relating to the transposition of the BRRD as amended from time to time, and the instruments, rules and standards created thereunder, pursuant to which, in particular, the obligations of the Guarantor in respect of the Guarantee can be reduced (in part or in whole), cancelled, modified, or converted into shares, other securities or other obligations of the Guarantor or any other person.

Please see the section headed "Text of the Guarantee of BNP Paribas" in this document for further details, in particular clause 6 of the Guarantee with respect to the Bail-In Power.

The Issuer's obligations under the Structured Products are not subject to the "Bail-In Power"

As the Issuer is not subject to the BRRD, the obligations of the Issuer under the Structured Products will not be subject to the exercise of any Bail-In Power in respect of the Issuer.

However, in the event of a default by the Issuer of its obligations under the Structured Products, and if any Bail-In Power is exercised over the Guarantor with respect to the Guarantee, you may not be able to recover all or even part of the amount due under the Structured Products (if any) from the Guarantor under the Guarantee, or you may receive a different security issued by the Guarantor (or another person) in place of the amount (if any) due to you under the Structured Products by the Issuer, which may be worth significantly less than the amount due to you under the Structured Products at expiry. For further details, please refer to the paragraph headed "Risks relating to the BRRD" under the section "Risk Factors" of this document.

The Guarantor's obligations with respect to the Guarantee are subject to the "Bail-In Power"

In addition, the Guarantee includes a contractual term regarding the "Bail-In Power" and any liability covered by the Guarantor will be contractually subject to the exercise of any "Bail-In Power" by the relevant resolution authority if such authority should so decide at the relevant time.

By investing in the Structured Products, you acknowledge, accept, consent and agree to be contractually bound by the exercise of any Bail-In Power by the relevant resolution authorities over the Guarantor. You further acknowledge, accept, consent and agree that your rights under the Guarantee are contractually subject to, and will be varied, if necessary, so as to give effect to, the exercise of any Bail-In Power by the relevant resolution authorities.

The effect of the exercise of the Bail-In Power by the relevant resolution authority over the Guarantor may include and result in any of the following, or some combination thereof:

(a) the reduction of all, or a portion, of the amounts payable by the Guarantor under the terms of the Guarantee (including a reduction to zero);

(b) the conversion of all, or a portion, of the amounts due under the Guarantee into shares or other securities or other obligations of the Guarantor or of another person, including by means of an amendment, modification or variation of the contractual terms, in which case you agree to accept in lieu of your contractual rights under the terms of the Guarantee any such shares, other securities or other obligations of the Guarantor or another person;

(c) the cancellation of the Guarantee;

(d) the amendment or alteration of the maturity of the Guarantee or amendment of the amount of interest payable on the Guarantee, or the date on which the interest becomes payable, including by suspending payment for a temporary period; and/or

(e) if applicable, the variation of the terms of the Guarantee, if necessary to give effect to the exercise of the Bail-In Power by the relevant resolution authority.

Accordingly, in the event of a default by the Issuer of its obligations under the Structured Products guaranteed by the Guarantee and if any Bail-In Power is exercised over the Guarantor with respect to the Guarantee, you may not be able to recover all or even part of the amount due under the Structured Products (if any) from the Guarantor under the Guarantee, or you may receive a different security issued by the Guarantor (or another person) in place of the amount (if any) due to you under the Structured Products from the Issuer, which may be worth significantly less than the amount due to you under the Structured Products (if any).

Moreover, the relevant resolution authorities may exercise the Bail-In Power without providing any advance notice to, or requiring your further consent.

Please refer to the paragraph headed "Risks relating to the BRRD" under the section "Risk Factors" of this document for further details of the relevant risk factors applicable to the Structured Products.

DESCRIPTION OF THE ISSUER

History

Our name is:

BNP Paribas Issuance B.V.

We are a private limited company under Dutch law ("**besloten vennootschap met beperkte aansprakelijkheid**"), having its registered office at Herengracht 595, 1017 CE Amsterdam, the Netherlands and registered with the Commercial Register under number 33215278. We were incorporated on 10 November 1989.

Business

Our objects are:

(a) to borrow, lend out and collect monies, including but not limited to the issue or the acquisition of debentures, debt instruments, financial instruments such as, among others, warrants and certificates of any nature, with or without indexation based on, inter alia, shares, basket of shares, stock exchange indexes, currencies, commodities or futures on commodities, and to enter into related agreements;

(b) to finance enterprises and companies;

(c) to establish and to in any way participate in, manage and supervise enterprises and companies;

(d) to offer advice and to render services to enterprises and companies with which the company forms a group of companies, and to third parties;

(e) to grant security, to bind the company and to encumber assets of the company for the benefit of enterprises and companies with which the company forms a group of companies, and of third parties;

(f) to acquire, manage, exploit and dispose of registered property and asset value in general;

(g) to trade in currencies, securities and asset value in general;

(h) to exploit and trade in patents, trademark rights, licenses, know-how and other industrial rights of ownership;

(i) to engage in industrial, financial and commercial activities of any nature,

and all other things as may be deemed incidental or conducive to the attainment of the above objects, in the broadest sense of the word.

Share capital

The issued share capital is 45,379 euros, divided in 45,379 shares of one euro each.

All shares are registered shares and no share certificates have been issued.

Management

Management Board

Our management will be composed of a Management Board with one or several members appointed by the general meeting of shareholders.

Duties of the Management Board

Within the limits of the constitutional documents, the Management Board will be responsible for our management.

Delegation of management

BNP Paribas is our sole shareholder. On 31 January 2016, BNP Paribas has appointed as sole member of the Management Board BNP Paribas Finance B.V., a company established and existing under the laws of the Netherlands, with its registered office at Herengracht 595, 1017 CE Amsterdam, the Netherlands. Messrs. Herskovic, Stroet, van Asma and Thielemans as directors of BNP Paribas Finance B.V. have the power to take all necessary measures in relation to the issue of securities of BNP Paribas Issuance B.V..

DESCRIPTION OF THE GUARANTOR

History

1966: Creation of BNP

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

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

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

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

1987: Privatisation of Compagnie Financière de Paribas

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

1993: Privatisation of BNP

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

1998: Creation of Paribas

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

1999: A momentous year for the Group

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

2000: Creation of BNP Paribas

BNP and Paribas merged on 23 May 2000.

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

2006: Acquisition of BNL in Italy

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

2009: Merger with the Fortis group

BNP Paribas took control of Fortis Bank and BGL (Banque Générale du Luxembourg), thereby creating a European leader in Retail Banking, with four domestic markets.

Key figures – Ratings

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

It operates in 72 countries and has more than 202,000 employees, including more than 154,000 in Europe. BNP Paribas holds key positions in its two main businesses:

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

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

Capital Stock

As at 31 December 2018, BNP Paribas' share capital stood at EUR2,499,597,122 divided into 1,249,798,561 shares.

Further information

For more information on BNP Paribas, please visit http://invest.bnpparibas.com/en.

Board of Directors

The following table sets forth the names of the current members of the Board of Directors, their current function at the Bank, their business address and their principal business activities outside of the Bank as at 31 December 2018, except where specified:

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

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

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

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

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad:
BNP Paribas(*), Chairman of the Board of directors TEB Holding AS (Turkey), director

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

Participation(1) in specialised committees of French or foreign companies:
Total SA, member of the Corporate Governance and Ethics Committee and member of the Strategy & CSR Committee

Other(1):
Centre for Prospective Studies and International Information (CEPII), Chairman
Institute of International Finance (IIF), member International Advisory Board of Orange, member
International Advisory Council of China Development Bank (CDB), member
International Advisory Council of China Investment Corporation (CIC), member
International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS), member

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman of the Board of directors: BNP Paribas **Director:** TEB Holding AS (Turkey), Total SA **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), International Advisory Board of Orange, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)	**Chairman of the Board of directors:** BNP Paribas **Director:** TEB Holding AS (Turkey), Total SA **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), International Advisory Board of Orange, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)	**Chairman of the Board of directors:** BNP Paribas **Director:** TEB Holding AS (Turkey) **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), International Advisory Board of Orange, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC)	**Chairman of the Board of directors:** BNP Paribas **Director:** Bank Gospodarki Zywnosciowej (BGZ) (Poland), TEB Holding AS (Turkey) **Chairman:** Centre for Prospective Studies and International Information (CEPII) **Member:** Institute of International Finance (IIF), International Advisory Board of Orange, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC)

(1) At 31 December 2018.
(*) Listed company.

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

Date of birth: 14 July 1961
Nationality: French
Term start and end dates: 26 May 2016 – 2019 AGM
Date first elected to the Board: 12 May 2010

Number of BNP Paribas shares held[(1)]: 84,426[(2)]
Office address: 3, rue d'Antin
75002 PARIS
FRANCE

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

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

Other offices [(1)] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Carrefour[(*)], director

Others [(1)]:
Association pour le Rayonnement de l'Opéra de Paris, Chairman
Entreprise pour l'Environnement, Vice-Chairman
Fédération Bancaire Française, member

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:
Director and Chief Executive Officer: BNP Paribas
Chairman: Fédération Bancaire Française, Association pour le Rayonnement de l'Opéra de Paris
Vice-Chairman: Entreprise pour l'Environnement
Director: Carrefour

2016:
Director and Chief Executive Officer: BNP Paribas
Director: Carrefour

2015:
Director and Chief Executive Officer: BNP Paribas
Director: Carrefour, BNP Paribas Fortis (Belgium)

2014:
Director and Chief Executive Officer: BNP Paribas
Director: Carrefour, BNP Paribas Fortis (Belgium)

(1) At 31 December 2018.
(2) Includes 21,881 BNP Paribas shares held as units in the shareholders' fund under the Company Savings Plan.
(*) Listed company.

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

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

Number of BNP Paribas shares held[(1)]: 1,900
Office address: 43, rue Bayen
75017 PARIS,
FRANCE

Education
Graduate of the École des Mines
Corps des Mines

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

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

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

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

Other:
École Nationale Supérieure Mines ParisTech, Chairman
Club d'affaires Franco-Japonais, Co-Chairman

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

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

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

(1) At 31 December 2018.
(*) Listed company.

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

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

Number of BNP Paribas shares held[1]: 3,000
Office address: Les Miroirs
92096 LA DEFENSE CEDEX,
FRANCE

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

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

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

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

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman and Chief Executive Officer: Compagnie de Saint-Gobain **Director:** BNP Paribas GIE SGPM Recherches, Saint-Gobain Corporation (United States)	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas GIE SGPM Recherches, Saint-Gobain Corporation (United States)	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas GIE SGPM Recherches, Saint-Gobain Corporation (United States)	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas, Veolia Environnement, GIE SGPM Recherches, Saint-Gobain Corporation (United States)

(1) At 31 December 2018.
(*) Listed company.

Monique COHEN
Principal function: Partner of Apax Partners

Date of birth: 28 January 1956
Nationality: French
Term start and end dates: 23 May 2017 – 2020 AGM
Date first elected to the Board: 12 February 2014, ratified by the Annual General Meeting of 14 May 2014

Number of BNP Paribas shares held(1): 9,620
Office address: 1, rue Paul-Cézanne
75008 PARIS,
FRANCE

Education
Graduate of the École Polytechnique
Master's Degree in Mathematics
Master's Degree in Business Law

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

Offices(1) held under the principal function:
Apax Partners SAS, director
Proxima Investissement SA (Luxembourg), Chairman of the Board
Fides Holdings, Chairman of the Board of directors
Fides Acquisitions, director

Other offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Hermès(*), Vice-Chairman of the Supervisory Board
Safran(*), senior director

Participation(1) in specialised committees of French or foreign companies:
BNP Paribas, Chairman of the Governance, Ethics, Nominations and CSR Committee, member of the Internal Control, Risk and Compliance Committee
Hermès, Chairman of the Audit and Risk Committee Safran, member of the Audit and Risk Committee

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman of the Board of directors: Proxima Investments SA (Luxembourg), Fides Holdings, Fides Acquisitions **Vice-Chairman of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners SAS	**Chairman of the Board of directors:** Proxima Investment SA (Luxembourg) **Vice-Chairman and member of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners Midmarket SAS **Member:** Special Committee (advisory body) of Global Project SAS, Supervisory Board of JC Decaux	**Chairman of the Board of directors:** Proxima Investment SA (Luxembourg) **Vice-Chairman and member of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners Midmarket SAS **Member:** Special Committee (advisory body) of Global Project SAS, Supervisory Board of JC Decaux	**Chairman of the Board of directors:** Proxima Investment SA (Luxembourg) **Chairman of the Supervisory Board:** Trocadero Participations SAS **Vice-Chairman and member of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners Midmarket SAS **Chief Operating Officer:** Altamir Gérance SA **Chairman:** Trocadero Participations II SAS **Member:** Special Committee (advisory body) of Global Project SAS, Supervisory Board of JC Decaux

(1) At 31 December 2018.
(*) Listed company.

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

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

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

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

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

Offices[1] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Vanbreda Risk & Benefits NV, director
Unibreda NV, director

Participation[1] in specialised committees of French or foreign companies:
BNP Paribas, member of the Financial Statements Committee

Other[1]:
Gasthuiszusters Antwerpen, director
Regroupement GZA-ZNA, director
BluHealth Innovation Center, director
Chamber of Commerce bureau, VOKA Antwerp – Waasland (Belgium), Vice-Chairman

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:
Director: BNP Paribas Vanbreda Risk & Benefits NV (Belgium), Unibreda NV
Vice-Chairman: Chamber of Commerce bureau, VOKA Antwerp – Waasland (Belgium)
Member: Belgian – American Educational Foundation (Belgium)
Adviser to the Board of directors: Lannoo publishing company (Belgium)

2016:
Member of the Supervisory Board: GIMV XL
Director: BNP Paribas
Vice-Chairman: Waasland (Belgium)
Chairman: Board of directors of the Museum of Contemporary Art, Antwerp (Belgium)
Member: Belgian – American Educational Foundation (Belgium), of the Board of directors of Haute École Odisee (Belgium)
Adviser to the Board of directors: Lannoo publishing company (Belgium)

(1) At 31 December 2018.
(*) Listed company.

Hugues EPAILLARD
Principal function: Real estate business manager

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

Number of BNP Paribas shares held(1): 300(2)
Office address: 83, La Canebière
13001 MARSEILLE

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

Other(1):
Judge at the Marseille Employment Tribunal, Management section
Commission Paritaire de la Banque (Association Française des Banques – Recourse Commission), member

(1) At 31 December 2018.
(2) Includes 295 BNP Paribas shares held under the Company Savings Plan.
(*) Listed company.

Rajna Gibson-Brandon
Principal function: Professor in Finance at the University of Geneva

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

Number of BNP Paribas shares held(1): 0
Office address: 40, Boulevard Pont d'Arve
CH-1211 GENEVA 4
SWITZERLAND

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

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

Participation(1) in specialised committees of French or foreign companies:
n/a

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

(1) At 31 December 2018.
(*) Listed company.

Marion GUILLOU
Principal function: Chairman of the Board of directors of IAVFF-Agreenium, Extraordinary State Councillor

Date of birth: 17 September 1954
Nationality: French
Term start and end dates: 26 May 2016 – 2019 AGM
Date first elected to the Board: 15 May 2013

Number of BNP Paribas shares held[1]: 1,000
Office address: 1 place du Palais Royal
75001 PARIS,
FRANCE

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

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

Offices[1] held under the principal function:
IAVFF-Agreenium (public institution), Chairman of the Board of directors of Institut Agronomique, Vétérinaire et Forestier de France

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

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

Other[1]:
Care – France (NGO), director
International agricultural research centre (CIAT), director Bioversity International, director
IFRI, director
Universcience, director

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman of the Board of directors: IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Imerys, Veolia Environnement **Member:** Board of directors of Universcience, Board of directors of Care – France (NGO), Board of directors of IHEST (Institut des Hautes Études en Sciences et Technologies), Academic Council of the Academy of Technologies, Board of directors of Bioversity International	**Chairman of the Board of directors:** IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Apave, CGIAR, Imerys, Veolia Environnement **Member:** Board of directors of Care – France (NGO), Board of directors of IHEST (Institut des Hautes Études en Sciences et Technologies), Board of directors of Bioversity International	**Chairman of the Board of directors:** IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Apave, CGIAR, Imerys, Veolia Environnement **Member:** Board of directors of Fondation Nationale des Sciences Politiques (FNSP)	**Chairman of the Board of directors:** IAVFF-Agreenium (public institution) **Director:** BNP Paribas, Apave, CGIAR, Imerys, Veolia Environnement

(1) At 31 December 2018.
(*) Listed company.

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

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

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

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

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

Offices[(1)] held under the principal function:
SCOR SE[(*)], Chairman and Chief Executive Officer

Other offices [(1)] held in listed or unlisted companies outside the BNP Paribas Group, including abroad:
Invesco Ltd[(*)] (United States), director

Participation [(1)] in specialised committees of French or foreign companies:
BNP Paribas, Chairman of the Financial Statements Committtee
Invesco Ltd, Member of the Audit Committee, the Remuneration Committee, the Nominations and Corporate Governance Committee
SCOR SE, Chairman of the Strategic Committee

Other[(1)]:
Association de Genève, director
Global Reinsurance Forum – Reinsurance Advisory Board, member
Institut des Sciences morales et politiques, member
French Institute of Actuaries, qualified member

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Chairman and Chief Executive Officer: SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member:** Board of directors of Association de Genève, Global Reinsurance Forum – Reinsurance Advisory Board, Conference Board (Global counsellor) Institut des sciences morales et politiques, Institute of Actuaries	**Chairman and Chief Executive Officer:** SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member:** Board of directors of Association de Genève, Global Reinsurance Forum – Reinsurance Advisory Board, Conference Board (Global counsellor)	**Chairman and Chief Executive Officer:** SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member:** Board of directors of the Association de Genève, Bureau of the French insurance companies federation (Fédération Française des Sociétés d'Assurance), Global Reinsurance Forum – Reinsurance Advisory Board, Conference Board (Global counsellor)	**Chairman and Chief Executive Officer:** SCOR SE **Director:** BNP Paribas, Invesco Ltd (United States) **Member of the Supervisory Board:** Yam Invest NV (Netherlands) **Member:** Board of directors of the Geneva Association, Board of directors of the Association Le Siècle, Global Reinsurance Forum-Reinsurance Advisory Board Laboratoire d'Excellence Finance et Croissance Durable (LabexFCD), Conference Board (Global counsellor)

(1) At 31 December 2018.
(*) Listed company.

Nicole MISSON (until 15 February 2018)
Principal function: Customer Advisor

Date of birth: 21 May 1950
Nationality: French
Term start and end dates: elected by BNP Paribas executives employees for three years from 16 February 2015 – 15 February 2018
Date first elected to the Board: 1 July 2011

Number of BNP Paribas shares held: 1,937[2]
Office address: 32, rue de Clignancourt
75018 PARIS,
FRANCE

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

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

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

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	**2016:**	**2015:**	**2014:**
Judge at the Paris Employment Tribunal, Management section, **Director:** BNP Paribas **Member:** Commission Paritaire de la Banque (AFB – Recourse Commission)	Judge at the Paris Employment Tribunal, Management section, **Director:** BNP Paribas **Member:** Commission Paritaire de la Banque (AFB – Recourse Commission)	Judge at the Paris Employment Tribunal, Management section, **Director:** BNP Paribas **Member:** Commission Paritaire de la Banque (AFB – Recourse Commission)	Judge at the Paris Employment Tribunal, Management section, **Director:** BNP Paribas **Member:** Commission Paritaire de la Banque (AFB – Recourse Commission)

(1) At 5 February 2018.
(2) Includes 1,763 BNP Paribas shares held under the Company Savings Plan.
(*) Listed company.

Laurence PARISOT (until 25 September 2018)
Principal function: Chief Development Officer of Gradiva

Date of birth: 31 August 1959
Nationality: French
Term start and end dates: 13 May 2015 – 2018 AGM
Date first elected to the Board: 23 May 2006

Number of BNP Paribas shares held: 1,255
Office address: Immeuble Millénaire 2
35, rue de la Gare
75019 PARIS,
FRANCE

Education
Graduate of the Institut d'Études Politiques de Paris
Master's in Public Law, Université de Nancy II
Master of Advanced Studies, Institut d'Études Politiques de Paris

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

Offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
EDF(*), director Foxintelligence (SAS), director
Fives Group, member of the Supervisory Board

Participation(1) in specialised committees of French or foreign companies:
BNP Paribas, member of the Internal Control, Risk and Compliance Committee and of the Remuneration Committee
EDF, member of the Audit Committee and the Strategy Committee

Other(1):
Scientific and Assessment Board of Fondapol, Chairman Fondation Nationale des Sciences Politiques, director,
member of the Audit Committee
Université franco-allemande, director
European Council for Foreign Relations, member
Mouvement des Entreprises de France (Medef), Honorary Chairman
Fondation Brigitte Bardot, director

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:
Director: BNP Paribas, EDF, Foxintelligence (SAS)
Honorary Chairman: Mouvement des Entreprises de France (Medef)
Chairman: Scientific and Assessment Board of Fondapol
Member: Supervisory Board of Fives Group, Board of directors and Audit Committee of Fondation Nationale des Sciences Politiques, European Council for Foreign Relations, Board of directors of the Brigitte Bardot Foundation

2016:
Director: BNP Paribas, EDF
Honorary Chairman: Mouvement des Entreprises de France (Medef)
Chairman: Scientific and Assessment Board of Fondapol
Member: European Council for Foreign Relations, Board of directors of Fondation Nationale des Sciences Politiques, Board of directors of Université franco-allemande

2015:
Director: BNP Paribas, EDF
Vice-Chairman of the Management Board: Ifop SA
Honorary Chairman: Mouvement des Entreprises de France (Medef)
Chairman: Scientific and Assessment Board of Fondapol
Member: European Council for Foreign Relations

2014:
Director: BNP Paribas, Fives
Vice-Chairman of the Management Board: Ifop SA
Honorary Chairman: Mouvement des Entreprises de France (Medef)
Chairman: Scientific and Assessment Board of Fondapol
Member: Supervisory Board of Compagnie Générale des Établissements Michelin (SCA), Economic, social and Environmental Council (CESE), European Council for Foreign Relations

(1) At 25 September 2018.
(*) Listed company.

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

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

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

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

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

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

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

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:
Director: BNP Paribas
Member: Board of directors of l'Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany)
Research Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)

2016:
Director: BNP Paribas
Member: Board of directors of l'Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany)
Research Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)

2015:
Director: BNP Paribas
Member: Board of directors of l'Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany)
Research Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)

2014:
Director: BNP Paribas
Member: Board of directors of l'Association Notre Europe – Jacques-Delors Institute, Board of directors of United Europe (Germany)
Research Professor at Johns-Hopkins University, Department of European and Eurasian Studies (Bologna and Washington, DC)

(1) At 31 December 2018.
(*) Listed company.

Michel TILMANT
Principal function: Director of companies

Date of birth: 21 July 1952
Nationality: Belgian
Term start and end dates: 26 May 2016 – 2019 AGM
Date first elected to the Board: 12 May 2010
(Michel Tilmant served as non-voting director (censeur) of BNP Paribas from 4 November 2009 to 11 May 2010)

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

Education
Graduate of the University of Louvain

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

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

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

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

Other(1):
Cinven Ltd (United Kingdom), senior advisor
Royal Automobile Club of Belgium (Belgium), director
Université Catholique de Louvain (Belgium), director

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

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

2016:
Director: BNP Paribas, CapitalatWork, Foyer Group SA (Luxembourg), Foyer SA (Luxembourg), Lhoist Group SA (Belgium), Sofina SA (Belgium)
Manager: Strafin sprl (Belgium)
Member: Board of directors of the Royal Automobile Club of Belgium (Belgium), Board of directors of Université Catholique de Louvain (Belgium)
Senior advisor: Cinven Ltd (United Kingdom)

2015:
Director: BNP Paribas, CapitalatWork, Foyer Group SA (Luxembourg), Foyer SA (Luxembourg), Lhoist Group SA (Belgium), Sofina SA (Belgium)
Manager: Strafin sprl (Belgium)
Member: Board of directors of the Royal Automobile Club of Belgium (Belgium), Board of directors of Université Catholique de Louvain (Belgium)
Senior advisor: Cinven Ltd (United Kingdom)

2014:
Director: BNP Paribas, CapitalatWork, Foyer Group SA (Luxembourg), Foyer Assurances SA (Luxembourg), Lhoist Group SA (Belgium), Ark Life Ltd (Ireland), Guardian Acquisitions Limited (United Kingdom), Guardian Assurance Limited (United Kingdom), Guardian Financial Services Holdings Limited (United Kingdom), Guardian Holdings Limited (Jersey), NBGB SA (Belgium), Sofina SA (Belgium)
Manager: Strafin sprl (Belgium)
Member: Board of directors of the Royal Automobile Club of Belgium (Belgium), Board of directors of Université Catholique de Louvain (Belgium)
Senior advisor: Cinven Ltd (United Kingdom)

(1) At 31 December 2018.
(*) Listed company.

Sandrine VERRIER
Principal function: Production and sales support assistant

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

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

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

Participation(1) in specialised committees of French or foreign companies:
BNP Paribas, member of the Financial Statements Committee

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

(1) At 31 December 2018.

Fields WICKER-MIURIN
Principal function: Director of companies

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

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

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

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

Offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad:
Prudential Plc(*), director
SCOR SE(*), director

Participation(1) in specialised committees of French or foreign companies:
BNP Paribas, member of the Financial Statements Committee and of the Remuneration Committee
SCOR SE, member of the Strategic Committee, Risk Committee, Nominations and Remuneration Committee and Audit Committee, member of the Crisis Management Committee and Chairman of the CSR Committee

Other(1):
Co-founder and Partner at Leaders' Quest (United Kingdom)
UK Department of Digital Culture, Media and Sports, independent member of the Ministry Council, and Chairman of the Audit and Risk Committee

Functions at previous year-ends
(the companies listed are the parent companies of the groups in which the functions were carried out)

2017:	2016:	2015:	2014:
Director: BNP Paribas, Control Risks Group, SCOR SE **Independent member of the Ministry Council and Chairman of the Audit and Risks Committee:** UK Department of Digital Culture, Media and Sports	**Director:** BNP Paribas, Control Risks Group, SCOR SE **Independent member and Chairman of the Audit and Risk Committee:** UK Department of Digital Culture, Media and Sports	**Director:** BNP Paribas, Bilt Paper BV (Netherlands), SCOR SE **Member:** the Board of the Batten School of Leadership – University of Virginia (United States)	**Director:** BNP Paribas, Bilt Paper BV (Netherlands), SCOR SE, Ministry of Justice of Her Majesty's Government (United Kingdom) **Member:** the Board of the Batten School of Leadership – University of Virginia (United States)

(1) At 31 December 2018.
(*) Listed company.

LEGAL PROCEEDINGS AND ARBITRATION

BNP Paribas (the "**Bank**") is party as a defendant in various claims, disputes and legal proceedings (including investigations by judicial or supervisory authorities) in a number of jurisdictions arising in the ordinary course of its business activities, including inter alia in connection with its activities as market counterparty, lender, employer, investor and taxpayer. While the Bank cannot predict the ultimate outcome of all pending and threatened legal and regulatory proceedings, the Bank reasonably believes that they are either without legal merit, can be successfully defended or that the outcome of these actions is not expected to result in a significant loss for the Bank.

The Bank and certain of its subsidiaries are defendants in several actions pending before the United States Bankruptcy Court Southern District of New York brought by the Trustee appointed for the liquidation of Bernard L. Madoff Investment Securities LLC ("**BLMIS**"). These actions, known generally as "clawback claims", are similar to those brought by the BLMIS Trustee against numerous institutions, and seek recovery of amounts allegedly received by the BNP Paribas entities from BLMIS or indirectly through BLMIS-related "feeder funds" in which BNP Paribas entities held interests. The BLMIS Trustee claims in these actions that the amounts which BNP Paribas entities received are avoidable and recoverable under the U.S. Bankruptcy Code and New York state law. In the aggregate, the amount initially sought to be recovered in these actions approximated USD 1.3 billion. BNP Paribas has substantial and credible defenses to these actions and is defending against them vigorously.

In two decisions dated 22 November 2016 and 3 October 2018, the Bankruptcy Court rejected most of the claims brought by the BLMIS Trustee against BNP Paribas entities. An appeal is ongoing as to the 22 November 2016 decision. Oral argument was heard by the Court of Appeals for the Second Circuit on 16 November 2018. The 3 October 2018 decision will be subject to appeal at the conclusion of that suit.

Various litigations and investigations are ongoing relating to the restructuring of the Fortis group, now Ageas, of which BNP Paribas Fortis is no longer part, and to events having occurred before BNP Paribas Fortis became part of the BNP Paribas Group. Among these are litigations brought by shareholders groups in The Netherlands and Belgium against Ageas and, among others, against BNP Paribas Fortis, in relation to its role as global coordinator of Fortis (now Ageas)'s capital increase in October 2007 to partly finance its acquisition of ABN Amro Bank N.V.. These shareholders groups mainly allege that there has been a breach in financial communication, regarding, inter alia, the disclosure on the exposure to subprime mortgages. On 13 July 2018, the Amsterdam Court of Appeal has declared binding a settlement between Ageas and representatives of certain shareholders groups who held shares between 28 February 2007 and 14 October 2008. On 21 December 2018, Ageas indicated that it waived its right to terminate the settlement.

BNP Paribas Fortis is one of the releasees under the Ageas Settlement. This means that each eligible shareholder which has not opted out will be deemed to have fully released BNP Paribas Fortis from any claim regarding the events during this time. Litigation was also brought in Belgium by minority shareholders of Fortis against the Société fédérale de Participations et d'Investissement, Ageas and BNP Paribas seeking (amongst other things) damages from BNP Paribas as restitution for part of the BNP Paribas Fortis shares that were contributed to BNP Paribas in 2009, on the ground that the transfer of these shares was null and void. On 29 April 2016 the Brussels Commercial court decided to stay the proceedings until the resolution of the pending Fortis criminal proceeding in Belgium. BNP Paribas does not have tangible elements to assess the duration of such suspension.

Like many other financial institutions in the banking, investment, mutual funds and brokerage sectors, the Bank has received or may receive requests for information from supervisory, governmental or self-regulated agencies. The Bank responds to such requests, and cooperates with the relevant authorities and regulators and seeks to address and remedy any issues they may raise.

Regulatory and law enforcement authorities in multiple jurisdictions are conducting investigations or making inquiries of a number of financial institutions regarding trading on the foreign exchange markets. The Bank has been cooperating with the investigations and inquiries and has reponded to the information requests. Regarding the United States, on 24 May 2017, the New York Department of Financial Services ("**DFS**") announced that it had fined the Bank USD 350 million as part of a consent order for violations of New York banking law arising out of the Bank's global foreign exchange business. On 17 July 2017 the Board of Governors of the Federal Reserve System ("**FED**") announced that it had fined the Bank and certain of its US subsidiaries USD 246 million as part of a consent order for unsafe and unsound practices in the foreign exchange market. Under these respective consent orders, the Bank has also agreed to improve its internal policies and controls relating to its foreign exchange business and to certain designated market activities, with regard to the FED order. On 25 January 2018, BNP Paribas USA Inc. accepted to plead guilty in front of the U.S. District Court for the Southern District of New York to a single violation of the Sherman Antitrust Act. On 30 May 2018, the court imposed the sentence, as jointly recommended in the plea agreement between BNP Paribas USA Inc. and the Department of Justice ("**DOJ**"), consisting of (1) a fine of USD 90 million; (2) no probation, and (3) no order of restitution. In reaching the plea agreement with BNP Paribas USA Inc., the DOJ has noted the Bank's substantial efforts relating to compliance and remediation to address and prevent the re-occurrence through its compliance and remediation program of the issues arising from its FX trading business. On 29 August 2018, the U.S. Commodity Futures Trading Commission ("**CFTC**") announced the imposition of a civil penalty of USD 90 million on and paid by BNP Paribas Securities Corp. as part of a consent order following an investigation in connection with the USD ISDAFIX benchmark. The findings of the order were neither admitted nor denied by BNP Paribas Securities Corp. which, the CFTC noted in its order, had engaged in "significant remedial action [...] independent of the Commission's investigation".

The U.S. regulatory and law enforcement authorities are currently investigating or requesting information in relation to certain activities as reported in the international financial press in relation to the U.S. treasuries market and U.S. Agency bonds. The Bank, which has received some requests for information, is cooperating with investigations and is responding to requests for information. The outcome and potential impact of these investigations or requests for information is difficult to predict before their close and the subsequent discussions with the U.S. authorities. It should be noted that it has been reported that a number of financial institutions are involved in these investigations or requests for information and that it is sometimes the case that reviews carried out in connection therewith may lead to settlements including in particular the payment of fines or significant penalties depending on the circumstances specific to each situation.

RISK FACTORS

Not all of the risk factors described below will be applicable to a particular series of the Structured Products. Please consider all risks carefully prior to investing in any Structured Products and consult your professional independent financial adviser and legal, accounting, tax and other advisers with respect to any investment in the Structured Products. Please read the following section together with the risk factors set out in the relevant launch announcement and supplemental listing document.

General risks in relation to us and the Guarantor

Structured Products are unsecured obligations

The Structured Products are not secured on any of our or the Guarantor's assets or any collateral. Each series of Structured Products will constitute our general unsecured contractual obligations and the general unsecured contractual obligations of the Guarantor and of no other person and will rank pari passu with our other unsecured contractual obligations and the unsecured and unsubordinated debt of the Guarantor. At any given time, the number of Structured Products outstanding may be substantial.

Creditworthiness

If you purchase our Structured Products, you are relying upon our creditworthiness and the creditworthiness of the Guarantor and have no rights under the Structured Products against:

(a) any company which issues the underlying shares;

(b) the trustee or the manager of the underlying trust; or

(c) any index compiler of the underlying index

As our obligations under the Structured Products are unsecured, we do not guarantee the repayment of capital invested in any Structured Product.

If we become insolvent or default on our obligations under the Structured Products or the Guarantor becomes insolvent or defaults on its obligations under the Guarantee, you can only claim as our or the Guarantor's unsecured creditor regardless of the performance of the underlying asset and you may not be able to recover all or even part of the amount due under the Structured Products (if any).

Any downgrading of the Guarantor's rating by rating agencies such as Moody's, S&P or Fitch could result in a reduction in the trading value of the Structured Products.

No deposit liability or debt obligation

In respect of cash settled Structured Products, we have the obligation to deliver to you the Cash Settlement Amount (net of any Exercise Expenses) in accordance with the Conditions of each series of Structured Products upon expiry.

It is not our intention by the issue of any Structured Product (expressed, implicit or otherwise) to create a deposit liability of us or the Guarantor or a debt obligation of any kind.

Conflicts of interest

The BNP Group engages in commercial, banking and other activities for our own account or the account of others and, in connection with our other business activities, may possess or acquire material information about the Underlying Assets to which the relevant Structured Product is linked. Such activities may involve or otherwise affect the Underlying Assets in a manner that may cause consequences adverse to you or otherwise create conflicts of interests in connection with the issue of Structured Products by us. Such actions and conflicts may include, without limitation, the purchase and sale of securities and/or exercise of creditor rights. The BNP Group:

(a) has no obligation to disclose such information about the Underlying Assets or such activities. The BNP Group and our respective officers and directors may engage in any such activities without regard to the issue of Structured Products by us or the effect that such activities may directly or indirectly have on any Structured Product;

(b) may from time to time engage in transactions involving the Underlying Assets for its accounts and/or for accounts under its management and/or to hedge against the market risk associated with issuing the Structured Products. Such transactions may have a positive or negative effect on the price/level of the Underlying Assets and consequently upon the value of the relevant series of Structured Products;

(c) may from time to time act in other capacities with regard to the Structured Products, such as in an agency capacity and/or as the liquidity provider; and/or

(d) may issue other derivative instruments in respect of the Underlying Assets and the introduction of such competing products into the market place may affect the value of the relevant series of Structured Products.

General risks in relation to Structured Products

You may lose all your investment in the Structured Products

Structured Products involve a high degree of risk, and are subject to a number of risks which may include interest rate, foreign exchange, time value, market and/or political risks. Structured Products may expire worthless.

Generally speaking, options, warrants and equity linked instruments are priced primarily on the basis of the price/level/exchange rate of the Underlying Asset, the volatility of the Underlying Asset's price/level/exchange rate and the time remaining to expiry of the Structured Product.

The price of Structured Products generally may fall in value as rapidly as they may rise and you should be prepared to sustain a significant or total loss of the purchase price of the Structured Products. Assuming all other factors are held constant, the more the underlying share price, unit price, index level or exchange rate of a Structured Product moves in a direction against you, the greater the risk that you will lose all or a significant part of your investment.

The risk of losing all or any part of the purchase price of a Structured Product means that, in order to recover and realise a return on your investment, you must generally anticipate correctly the direction, timing and magnitude of any change in the price/level/exchange rate of the Underlying Asset as may be specified in the relevant launch announcement and supplemental listing document.

Changes in the price/level/exchange rate of an Underlying Asset can be unpredictable, sudden and large and such changes may result in the price/level/exchange rate of the Underlying Asset moving in a direction which will negatively impact upon the return on your investment. You therefore risk losing your entire investment if the price/level/exchange rate of the relevant Underlying Asset does not move in your anticipated direction.

The value of the Structured Products may be disproportionate with or opposite to movement in the price/level/exchange rate of the Underlying Assets

An investment in Structured Products is not the same as owning the Underlying Assets or having a direct investment in the Underlying Assets. The market values of Structured Products are linked to the relevant Underlying Assets and will be influenced (positively or negatively) by it or them but any change may not be comparable and may be disproportionate. It is possible that while the price/level/exchange rate of the Underlying Assets is moving up, the value of the Structured Product is falling.

If you intend to purchase any series of Structured Products to hedge against the market risk associated with investing in an Underlying Asset specified in the relevant launch announcement and supplemental listing document, you should recognise the complexities of utilising Structured Products in this manner. For example, the value of the Structured Products may not exactly correlate with the price/level/exchange rate of the Underlying Asset. Due to fluctuations in supply and demand for Structured Products, there is no assurance that their value will correlate with movements of the Underlying Asset. The Structured Products may not be a perfect hedge to the Underlying Asset or portfolio of which the Underlying Asset forms a part.

It may not be possible to liquidate the Structured Products at a level which directly reflects the price/level/exchange rate of the Underlying Asset or portfolio of which the Underlying Asset forms a part. Therefore, it is possible that you could suffer substantial losses in the Structured Products in addition to any losses suffered with respect to investments in or exposures to the Underlying Asset.

Possible illiquidity of secondary market

It is not possible to predict if and to what extent a secondary market may develop in any series of Structured Products and at what price such series of Structured Products will trade in the secondary market and whether such market will be liquid or illiquid. The fact that the Structured Products are listed does not necessarily lead to greater liquidity than if they were not listed.

If any series of Structured Products are not listed or traded on any exchange, pricing information for such series of Structured Products may be difficult to obtain and the liquidity of that series of Structured Products may be adversely affected.

The liquidity of any series of Structured Products may also be affected by restrictions on offers and sales of the Structured Products in some jurisdictions.

Transactions in off-exchange Structured Products may be subject to greater risks than dealing in exchange-traded Structured Products. To the extent that any Structured Products of a series is closed out, the number of Structured Products outstanding in that series will decrease, which may result in a lessening of the liquidity of Structured Products. A lessening of the liquidity of the affected series of Structured Products may cause, in turn, an increase in the volatility associated with the price of such Structured Products.

While we have appointed, or will appoint, a liquidity provider for the purposes of making a market for each series of Structured Products, there may be circumstances outside our control or the appointed liquidity provider's control where the appointed liquidity provider's ability to make a market in some or all series of Structured Products is limited, restricted and/or, without limitation, frustrated. The more limited the secondary market, the more difficult it may be for you to realise the value of the Structured Products prior to expiry.

Interest rates

Investments in the Structured Products may involve interest rate risk with respect to the currency of denomination of the Underlying Assets and/or the Structured Products. A variety of factors influence interest rates such as macro economic, governmental, speculative and market sentiment factors. Such fluctuations may have an impact on the value of the Structured Products at any time prior to valuation of the Underlying Assets relating to the Structured Products.

Time decay

The settlement amount of certain series of Structured Products at any time prior to expiration may be less than the trading price of such Structured Products at that time. The difference between the trading price and the settlement amount will reflect, among other things, a "time value" of the Structured Products. The "time value" of the Structured Products will depend partly upon the length of the period remaining to expiration and expectations concerning the price/level/exchange rate of the Underlying Assets. The value of a Structured Product will decrease over time. Therefore, the Structured Products should not be viewed as products for long term investments.

Exchange rate risk

There may be an exchange rate risk in the case of cash settled Structured Products where the Cash Settlement Amount will be converted from a foreign currency into the Settlement Currency. Exchange rates between currencies are determined by forces of supply and demand in the foreign exchange markets. These forces are, in turn, affected by factors such as international balances of payments and other economic and financial conditions, government intervention in currency markets and currency trading speculation. Fluctuations in foreign exchange rates, foreign political and economic developments and the imposition of exchange controls or other foreign governmental laws or restrictions applicable to such investments may affect the foreign currency market price and the exchange rate-adjusted equivalent price of the Structured Products. Fluctuations in the exchange rate of any one currency may be offset by fluctuations in the exchange rate of other relevant currencies.

Possible early termination for illegality or impracticability

If the Conditions provide for termination due to illegality and we determine in good faith and in a commercially reasonable manner that, for reasons beyond our control, the performance of (i) our obligations under the relevant Structured Products or (ii) our Guarantor's obligations under the Guarantee has become illegal or impracticable, we may terminate early the relevant Structured Products. If we terminate early the relevant Structured Products, we will, if and to the extent permitted by applicable law, pay an amount determined by us in good faith and in a commercially reasonable manner to be the fair market value of the relevant Structured Products notwithstanding the illegality or impracticability less our cost of unwinding the underlying hedging arrangements. Such amount may be substantially less than your initial investment and may be zero.

Foreign Account Tax Compliance withholding may affect payments on the Structured Products

Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986 ("**FATCA**") impose a new reporting regime and, potentially, a 30% withholding tax with respect to (i) certain payments from sources within the United States, (ii) "foreign passthru payments" made to certain non-U.S. financial institutions that do not comply with this new reporting regime, and (iii) payments to certain investors that do not provide identification information with respect to interests issued by a participating non-U.S. financial institution.

While the Structured Products are in dematerialised form and held within the clearing systems, in all but the most remote circumstances, it is not expected that FATCA will affect the amount of any payment received by the clearing systems. However, FATCA may affect payments made to custodians or intermediaries in the subsequent payment chain leading to the ultimate investor if any such custodian or intermediary generally is unable to receive payments free of FATCA withholding. It also may affect payment to any ultimate investor that is a financial institution that is not entitled to receive payments free of withholding under FATCA, or an ultimate investor that fails to provide its broker (or other custodian or intermediary from which it receives payment) with any information, forms, other documentation or consents that may be necessary for the payments to be made free of FATCA withholding. Investors should choose the custodians or intermediaries with care (to ensure each is compliant with FATCA or other laws or agreements related to FATCA) and provide each custodian or intermediary with any information, forms, other documentation or consents that may be necessary for such custodian or intermediary to make a payment free of FATCA withholding. An Issuer's obligations under the Structured Products are discharged once it has paid the clearing systems and an Issuer has therefore no responsibility for any amount thereafter transmitted through the clearing systems and custodians or intermediaries. Prospective investors should refer to the section "*Taxation – Taxation in the United States of America – Foreign Account Tax Compliance Act*."

Modification to the Conditions

Under the Conditions, we may, without your consent, effect any modification of the terms and conditions applicable to the Structured Products which, in our opinion, is:

(a) not materially prejudicial to the interest of the holders of the Structured Products generally (without considering the circumstances of any individual Holder or the tax or other consequences of such modification in any particular jurisdiction);

(b) of a formal, minor or technical nature;

(c) to correct a manifest error; or

(d) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Risks in relation to the Underlying Asset

You have no right to the Underlying Asset

Unless specifically indicated in the Conditions, you will not be entitled to:

(a) voting rights or rights to receive dividends or other distributions or any other rights that a holder of the underlying shares or units in the underlying trust would normally be entitled to; or

(b) voting rights or rights to receive dividends or other distributions or any other rights with respect to any company constituting any underlying index.

Valuation risk

An investment in Structured Products may involve valuation risks in relation to the Underlying Asset to which the particular series of Structured Products relate. The price/level/exchange rate of the Underlying Asset may vary over time and may increase or decrease by reference to a variety of factors which may include corporate actions, macro economic factors, market trends, speculation and/or (where the Underlying Asset is an index) changes in the formula for or the method of calculating the index.

Where the Structured Products are linked to certain Underlying Asset in a developing financial market, you should note a developing financial market differs from most developed markets in various aspects, including the growth rate, government involvement and control, level of development and foreign exchange control. Any rapid or significant changes in the economic, political or social condition and the government policies of the developing financial market may result in large fluctuations in the value or level of the Underlying Asset. Such fluctuations may affect the market value of the Structured Products and hence your investment return.

Where the Structured Products are linked to a currency pair as the Underlying Asset, you should note that the foreign exchange market can be very volatile and unpredictable. Exchange rate of the currencies may fluctuate as a result of market, economic and/or political conditions in the principal financial centres of the countries of the currencies and also in other countries. For example, it can be affected by change of governments' monetary or foreign exchange policies, rates of inflation, interest rate levels and the extent of governmental surpluses or deficits in the relevant countries. Such fluctuations may affect the market value of the Structured Products and hence your investment return.

You must be experienced in dealing in these types of Structured Products and must understand the risks associated with dealing in such products. You should reach an investment decision only after careful consideration, with your advisers, of the suitability of any Structured Product in light of your particular financial circumstances, the information regarding the relevant Structured Product and the particular Underlying Asset to which the value of the relevant Structured Product relates.

Adjustment related risk

Certain events relating to the Underlying Asset require or, as the case may be, permit us to make certain adjustments or amendments to the Conditions. You have limited anti-dilution protection under the Conditions. We may, in our sole discretion:

(a) in respect of Structured Products relating to single equities or unit trust, adjust, among other things, the Entitlement, the Exercise Price/ Strike Price and the Call Price (if applicable) upon exercise or any other terms (including without limitation the closing price of the Underlying Asset) of any series of Structured Products for events such as rights issue, bonus issue, subdivision, consolidation, restructuring event or certain cash distribution;

(b) in respect of Structured Products relating to an index, determine the Closing Level;

(c) in respect of Structured Products relating to a commodity or commodity futures, adjust, among other things, the Closing Price and if applicable, the Price Source and/or the Exchange Rate; or

(d) in respect of Structured Products relating to a currency pair, adjust, among other things, the Spot Rate and the Settlement Exchange Rate (if applicable).

However, we are not obliged to make an adjustment for every event that may affect an Underlying Asset, in which case the market price of the Structured Products and the return upon the expiry of the Structured Products may be affected.

In the case of Structured Products which relate to an index, the level of the index may be published by the index compiler at a time when one or more components comprising the index are not trading. If this occurs on the Valuation Date which does not constitute a Market Disruption Event under the Conditions, then the Closing Level of the index is calculated by reference to the remaining components in the index. In addition, certain events relating to the index (including a material change in the formula or the method of calculating the index or a failure to publish the index) permit us to determine the level of the index on the basis of the formula or method last in effect prior to such change in formula or method.

Suspension of trading

If an Underlying Asset is suspended from trading or dealing for whatever reason on the market on which it is listed or dealt in (including the Stock Exchange), trading in the relevant series of Structured Products may be suspended for a similar period. The value of the Structured Products will decrease over time as the length of the period remaining to expiration becomes shorter. You should note that in the case of a prolonged suspension period, the market price of the Structured Products may be subject to a significant impact of time decay of such prolonged suspension period and may fluctuate significantly upon resumption of trading after the suspension period of the Structured Products. This may adversely affect your investment in the Structured Products.

Delay in settlement

Unless otherwise specified in the relevant Conditions, in the case of any termination or expiry, as the case may be, of Structured Products, there may be a time lag between the date on which the Structured Products are terminated or expired, and the time the applicable settlement amount is paid to you. Any such delay between the time of termination or expiry and the payment of the settlement amount will be specified in the relevant Conditions.

However, such delay could be significantly longer, particularly in the case of a delay in the termination or expiry of such Structured Products arising from a determination by us that a Market Disruption Event, Settlement Disruption Event or delisting of the underlying shares or units in the underlying trust has occurred at any relevant time or that adjustments are required in accordance with the Conditions.

That applicable settlement amount may change significantly during any such period, and such movement or movements could decrease or modify the settlement amount or entitlement value (as the case may be) of the Structured Products.

You should note that in the event of there being a Settlement Disruption Event or a Market Disruption Event, payment of the Cash Settlement Amount may be delayed as more fully described in the Conditions.

Risks relating to Structured Products over trusts

In the case of Structured Products which relate to the units of a trust:

(a) the BNP Group is not able to control or predict the actions of the trustee or the manager of the relevant trust. Neither the trustee nor the manager of the relevant trust (i) is involved in the offer of any Structured Product in any way, or (ii) has any obligation to consider the interest of the holders of any Structured Product in taking any actions that might affect the value of any Structured Product; and

(b) we have no role in the relevant trust. The trustee or manager of the relevant trust is responsible for making investment and other trading decisions with respect to the management of the relevant trust consistent with its investment objectives and in compliance with the investment restrictions as set out in the constitutive documents of the relevant trust. The manner in which the relevant trust is managed and the timing of actions may have a significant impact on the performance of the relevant trust. Hence, the market price of the relevant units is also subject to these risks.

Exchange traded funds

In the case of Structured Products linked to units of an exchange traded fund ("**ETF**"), you should note that:

(a) an ETF is exposed to the economic, political, currency, legal and other risks of a specific sector or market related to the underlying asset pool or index or market that the ETF is designed to track;

(b) there may be disparity between the performance of the ETF and the performance of the underlying asset pool or index or market that the ETF is designed to track as a result of, for example, failure of the tracking strategy, currency differences, fees and expenses; and

(c) where the underlying asset pool or index or market that the ETF tracks is subject to restricted access, the efficiency in the unit creation or redemption to keep the price of the ETF in line with its net asset value may be disrupted, causing the ETF to trade at a higher premium or discount to its net asset value. Hence, the market price of the Structured Products will also be indirectly subject to these risks.

Synthetic exchange traded funds

Additionally, where the Underlying Asset comprises the units of an ETF adopting a synthetic replication investment strategy to achieve its investment objectives by investing in financial derivative instruments linked to the performance of an underlying asset pool or index that the ETF is designed to track ("**Synthetic ETF**"), you should note that:

(a) investments in financial derivative instruments will expose the Synthetic ETF to the credit, potential contagion and concentration risks of the counterparties who issued such financial derivative instruments. As such counterparties are predominantly international financial institutions, the failure of one such counterparty may have a negative effect on other counterparties of the Synthetic ETF.

Even if the Synthetic ETF has collateral to reduce the counterparty risk, there may still be a risk that the market value of the collateral has fallen substantially when the Synthetic ETF seeks to realise the collateral; and

(b) the Synthetic ETF may be exposed to higher liquidity risk if the Synthetic ETF invests in financial derivative instruments which do not have an active secondary market.

The above risks may have a significant impact on the performance of the relevant ETF or Synthetic ETF and hence the market price of Structured Products linked to such ETF or Synthetic ETF.

ETF investing through RQFII and/or China Connect

Where the Underlying Asset comprises the units of an ETF ("**China ETF**") issued and traded outside Mainland China with direct investment in the Mainland China's securities markets through the Renminbi Qualified Foreign Institutional Investor ("**RQFII**") regime and/or the Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect (collectively, "**China Connect**"), you should note that, amongst others:

(a) the novelty and untested nature of China Connect make China ETFs riskier than traditional ETFs investing directly in more developed markets. The policy and rules for RQFII and China Connect prescribed by the Mainland China government are new and subject to change, and there may be uncertainty to their implementation. The uncertainty and change of the laws and regulations in Mainland China may adversely impact on the performance of China ETFs and the trading price of the relevant units;

(b) a China ETF primarily invests in securities traded in the Mainland China's securities markets and is subject to concentration risk. Investment in the Mainland China's securities markets (which are inherently stock markets with restricted access) involves certain risks and special considerations as compared with investment in more developed economies or markets, such as greater political, tax, economic, foreign exchange, liquidity and regulatory risks. The operation of a China ETF may also be affected by interventions by the applicable government(s) and regulators in the financial markets; and

(c) investment by a China ETF in the Mainland China's securities markets under the RQFII regime will be subject to its manager's RQFII quota allocated to such China ETF. In addition, trading of securities invested by the China ETF under China Connect will be subject to a daily quota which does not belong to such China ETF and is utilised on a first-come-first-serve basis. In the event that the RQFII quota allocated to such China ETF and/or the daily quota under China Connect are reached, the manager may need to suspend creation of further units of such China ETF, and therefore may affect liquidity in unit trading of such China ETF. In such event, the trading price of a unit of such China ETF is likely to be at a significant premium to its net asset value, and may be highly volatile.

The above risks may have a significant impact on the performance of the relevant units and the price of the Structured Products.

Please read the offering documents of the relevant China ETF to understand its key features and risks.

ETF traded through dual counters model

Where the Underlying Asset comprises the units of an ETF which adopts the dual counters model for trading its units on the Stock Exchange in Renminbi ("**RMB**") and Hong Kong dollars ("**HKD**") separately, the novelty and relatively untested nature of the Stock Exchange's dual counters model may bring the following additional risks:

(a) the Structured Products may be linked to the HKD-traded units or the RMB-traded units. If the Underlying Asset is the HKD-traded units, movements in the trading prices of the RMB-traded units should not directly affect the price of the Structured Products. Similarly, if the Underlying Asset is the RMB-traded units, movements in the trading prices of the HKD-traded units should not directly affect the price of the Structured Products;

(b) if there is a suspension of inter-counter transfer of such units between the HKD counter and the RMB counter for any reason, such units will only be able to be traded in the relevant currency counter on the Stock Exchange, which may affect the demand and supply of such units and have an adverse effect on the price of the Structured Products; and

(c) the trading price on the Stock Exchange of the HKD-traded units and RMB-traded units may deviate significantly due to different factors, such as market liquidity, RMB conversion risk, supply and demand in each counter and the exchange rate between RMB and HKD. Changes in the trading price of the Underlying Asset in HKD or RMB (as the case may be) may adversely affect the price of the Structured Products.

*Real estate investment trust ("**REIT**")*

Where the Underlying Asset comprises the units of a REIT, you should note that the investment objective of a REIT is to invest in a real estate portfolio. Each REIT is exposed to risks relating to investments in real estate, including but not limited to (a) adverse changes in political or economic conditions; (b) changes in interest rates and the availability of debt or equity financing, which may result in an inability by the REIT to maintain or improve the real estate portfolio and finance future acquisitions; (c) changes in environmental, zoning and other governmental rules; (d) changes in market rents; (e) any required repair and maintenance of the portfolio properties; (f) breach of any property laws or regulations; (g) the relative illiquidity of real estate investment; (h) real estate taxes; (i) any hidden interests in the portfolio properties; (j) any increase in insurance premiums and (k) any uninsurable losses.

There may also be disparity between the market price of the units of a REIT and the net asset value per unit. This is because the market price of the units of a REIT also depends on many factors, including but not limited to (a) the market value and perceived prospects of the real estate portfolio; (b) changes in economic or market conditions; (c) changes in market valuations of similar companies; (d) changes in interest rates; (e) the perceived attractiveness of the units of the REIT against those of other equity securities; (f) the future size and liquidity of the market for the units and the REIT market generally; (g) any future changes to the regulatory system, including the tax system and (h) the ability of the REIT to implement its investment and growth strategies and to retain its key personnel.

The above risks may have a significant impact on the performance of the relevant units and the price of the Structured Products.

Risk Relating to CBBCs

Correlation between the price of a CBBC and the price/level of the Underlying Asset

When the Underlying Asset of a CBBC is trading at a price/level close to its Call Price/Call Level, the price of that CBBC tends to be more volatile and any change in the value of that CBBC at such time may be incomparable and disproportionate with the change in the price/level of the Underlying Asset.

Payout under CBBCs

It is expected that the value of each entitlement of CBBCs tends to mirror the value of the Underlying Asset. However, you are warned that the price of CBBCs will be determined not only by the trading value of the Underlying Asset but also by the impact of financing costs and/or dividends during the period in which the CBBCs are held by you. In particular, when the value of the Underlying Asset is close to the Call Price/Call Level, the price of the CBBCs will be more volatile.

Mandatory Call Event is irrevocable

A Mandatory Call Event is irrevocable unless it is triggered as a result of any of the following events:

(a) system malfunction or other technical errors of HKEX (such as the setting up of wrong Call Price/Call Level and other parameters); or

(b) manifest errors caused by the relevant third party price source (such as miscalculation of the index level by the relevant index compiler),

and in each case, we agree with the Stock Exchange that such Mandatory Call Event is to be revoked within such time as specified in the relevant launch announcement and supplemental listing document following the trading day on which the Mandatory Call Event is triggered. Upon revocation of the Mandatory Call Event, trading of the CBBCs will resume and any trade cancelled after such Mandatory Call Event will be reinstated.

Non-recognition of Post MCE Trades

The Stock Exchange and its recognised exchange controller, HKEX, shall not incur any liability (whether based on contract, tort (including, without limitation, negligence)), or any other legal or equitable grounds and, without regard to the circumstances giving rise to any purported claim (except in the case of wilful misconduct on the part of the Stock Exchange and/or HKEX) for any direct, consequential, special, indirect, economic, punitive, exemplary or any other loss or damage suffered or incurred by us or any other party arising from or in connection with the Mandatory Call Event or the suspension of trading ("**Trading Suspension**") or the non-recognition of trades after a Mandatory Call Event ("**Non-Recognition of Post MCE Trades**"), including, without limitation, any delay, failure, mistake or error in the Trading Suspension or Non-Recognition of Post MCE Trades.

The BNP Group shall not have any responsibility towards you for any losses suffered as a result of the Trading Suspension and/or Non-Recognition of Post MCE Trades, in connection with the occurrence of a Mandatory Call Event, the resumption of trading of the CBBCs or reinstatement of any Post MCE Trades cancelled as a result of the reversal of any Mandatory Call Event, notwithstanding that such Trading Suspension and/or Non-Recognition of Post MCE Trades occur as a result of an error in the observation of the event.

Residual Value may not include residual funding cost

For Category R CBBCs, the Residual Value (if any) payable by us following the occurrence of a Mandatory Call Event may or may not include the residual funding cost for the CBBCs. You may not receive any residual funding cost back from us upon early termination of a Category R CBBC upon a Mandatory Call Event.

Delay in announcements of a Mandatory Call Event

The Stock Exchange will notify the market as soon as practicable after the CBBC has been called upon the occurrence of a Mandatory Call Event. You must however be aware that there may be delay in the announcement of a Mandatory Call Event due to technical errors or system failures and other factors that are beyond our control or the control of the Stock Exchange.

Our hedging activities may adversely affect the price/level of the Underlying Asset

Any member of the BNP Group may carry out activities that minimise our risks related to the CBBCs, including effecting transactions for our own account or for the account of our customers and hold long or short positions in the Underlying Asset (whether for risk reduction purposes or otherwise). In addition, in connection with the offering of any CBBCs, we and/or any member of the BNP Group may enter into one or more hedging transactions with respect to the Underlying Asset. In connection with such hedging or market-making activities or with respect to proprietary or other trading activities by us and/or any member of the BNP Group may enter into transactions in the Underlying Asset which may affect the market price, liquidity or price/level of the Underlying Asset and/or the value of CBBCs and which could be deemed to be adverse to your interests. The BNP Group is likely to modify our hedging positions throughout the life of the CBBCs whether by effecting transactions in the Underlying Asset or in derivatives linked to the Underlying Asset. Further, it is possible that the advisory services which the BNP Group provides in the ordinary course of our business could lead to an adverse impact on the value of the Underlying Asset.

Unwinding of hedging arrangements

The trading and/or hedging activities of the BNP Group related to CBBCs and/or other financial instruments issued by us from time to time may have an impact on the price/level of the Underlying Asset and may trigger a Mandatory Call Event. In particular, when the Underlying Asset is trading close to the Call Price/Call Level, our unwinding activities may cause a fall or rise (as the case may be) in the trading price/level of the Underlying Asset, leading to a Mandatory Call Event.

In respect of Category N CBBCs, the BNP Group may unwind any hedging transactions entered into by us in relation to the CBBCs at any time even if such unwinding activities may trigger a Mandatory Call Event.

In respect of Category R CBBCs, before the occurrence of a Mandatory Call Event, the BNP Group may unwind our hedging transactions relating to the CBBCs in proportion to the amount of the CBBCs we repurchase from time to time. Upon the occurrence of a Mandatory Call Event, the BNP Group may unwind any hedging transactions in relation to the CBBCs. Such unwinding activities after the occurrence of a Mandatory Call Event may affect the trading price/level of the Underlying Asset and consequently the Residual Value of the CBBCs.

Adjustment related risk

We will make such adjustments as we consider appropriate as a consequence of certain corporate actions or index adjustment events affecting the Underlying Asset. Please refer to the subsection "Adjustment related risk" under the section "Risks in relation to the Underlying Asset".

In addition, for Single Equity CBBCs and Single Unit Trust CBBCs, if the Underlying Asset ceases to be listed on the Stock Exchange during the term of the CBBCs, we may make adjustments and amendments to the rights attaching to the CBBCs pursuant to Condition 6 of the Product Conditions of the relevant CBBCs set out in Part A and Part C of Appendix 3. Such adjustments and amendments will be conclusive and binding on you.

Risk relating to the legal form of the Structured Products

Each Structured Product will be represented by a global certificate registered in the name of HKSCC Nominees Limited (or such other nominee company as may be used by HKSCC from time to time in relation to the provision of nominee services to persons admitted for the time being by HKSCC as a participant of Central Clearing and Settlement System ("**CCASS**")). A risk of investing in a security that is issued in global registered form and held on your behalf within a clearing system effectively means that evidence of your title, as well as the efficiency of ultimate delivery of the Cash Settlement Amount, will be subject to the General Rules of CCASS and CCASS Operational Procedures ("**CCASS Rules**"). You should be aware of the following risks:

(a) you will not receive definitive certificates where the Structured Products remain in the name of HKSCC Nominees Limited for the entire life of the Structured Products;

(b) any register that is maintained by us or on our behalf, whilst available for inspection by you, will not be capable of registering any interests other than that of the legal title owner, in other words, it will record at all times that the Structured Products are being held by HKSCC Nominees Limited;

(c) you will have to rely solely upon your brokers/custodians and the statements you receive from such party as evidence of your interest in the investment;

(d) notices or announcements will be published on the HKEX's website and/or released by HKSCC to its participants via CCASS in accordance with the CCASS Rules. You will need to check the HKEX's website regularly and/or rely on your brokers/custodians to obtain such notices/announcements; and

(e) following the Expiry Date and the determination by us as to the Cash Settlement Amount, our obligations to you will be duly performed by payment of the Cash Settlement Amount (net of any Exercise Expenses) to HKSCC Nominees Limited as the "holder" of the Structured Products. HKSCC or HKSCC Nominees Limited will then distribute the received Cash Settlement Amount (net of any Exercise Expenses) to the respective CCASS participants in accordance with the CCASS Rules.

Potential fee arrangements with brokers and potential conflicts of interest of brokers

To the extent permissible by the applicable laws, regulations, codes and guidelines and/or recommendations (whether imposed by applicable law or by competent regulatory authorities) in effect from time to time, we may or may not enter into fee arrangements with brokers with respect to the Structured Products or dealings in, or related to, the relevant Underlying Asset. You should note that brokers with whom we have a fee arrangement (if any) do not, and cannot be expected to, deal exclusively in, or related to, the Structured Products or any relevant Underlying Asset and may from time to time engage in other dealings for their own accounts and/or for the accounts of their clients. Potential conflicts of interests may arise from the different roles played by such brokers in connection with their dealings in, or related to, the Structured Products, the relevant Underlying Asset and/or other financial products (including those issued by other institutions over the same relevant Underlying Asset). A broker's interests (economic or otherwise) in each role may potentially affect the Structured Products and/or the relevant Underlying Asset in a manner that may cause adverse consequences to you if you invest in the Structured Products.

Effect of the combination of risk factors unpredictable

Two or more risk factors may simultaneously have an effect on the value of a series of Structured Products such that the effect of any individual risk factor may not be predictable. No assurance can be given as to the effect any combination of risk factors may have on the value of a series of Structured Products.

Risks relating to the BRRD

Regulatory action(s) by the relevant resolution authorities in the event that the Guarantor is failing or likely to fail could materially affect the value of the Structured Products, and you may not be able to recover all or even part of the amount due by the Issuer under the Structured Products (if any)

The Guarantor is a bank incorporated in France and is subject to French legislation for implementing the BRRD. The BRRD provides for the establishment of an EU framework for the recovery and resolution of credit institutions and investment firms falling under the scope of the BRRD. The BRRD requires the governments of all EU Member States to provide their relevant resolution authorities with a set of tools to intervene sufficiently early and quickly in an unsound or failing institution so as to ensure the continuity of that institution's critical financial and economic functions, while minimising the impact of that institution's failure on the broader economy and financial system.

Under French legislation implementing the BRRD, substantial powers are granted to the ACPR and/or other relevant resolution authorities in the EU, to implement resolution measures in respect of a relevant entity (including, for example, the Guarantor) to protect and enhance the stability of the financial system of France if the relevant resolution authorities consider the failure of the relevant entity has become likely and certain other conditions are satisfied.

These powers include share transfer powers, property transfer powers (including powers for the partial transfer of property, rights and liabilities), and resolution instrument powers (including powers to make special bail-in provisions) over the relevant affected financial institution(s). In connection with the exercise of these powers under the BRRD, the relevant resolution authorities may take various actions in relation to certain liabilities of the Guarantor (including the Guarantee granted by the Guarantor over the Issuer's liabilities due under the Structured Products if such authorities consider amounts due under any such guarantee to fall within the scope of the Bail-In Power) without your consent, including (if applicable, among other things):

(a) transferring the Guarantee to another person (such as parent undertaking or a bridge institution) notwithstanding any restrictions on transfer under the terms of the Guarantee;

(b) the reduction of all, or a portion, of the amounts payable by the Guarantor under the terms of the Guarantee (including a reduction to zero);

(c) the conversion of all, or a portion, of the amounts due under the Guarantee into shares or other securities or other obligations of the Guarantor or of another person, including by means of an amendment, modification or variation of the terms of the Guarantee, in which case you agree to accept in lieu of your contractual rights under the terms of the Guarantee any such shares, other securities or other obligations of the Guarantor or another person;

(d) the cancellation of the Guarantee;

(e) the amendment or alteration of the maturity of the Guarantee or amendment of the amount of interest payable on the Guarantee, or the date on which the interest becomes payable, including by suspending payment for a temporary period; and/or

(f) if applicable, the variation of the terms of the Guarantee, if necessary to give effect to the exercise of the Bail-In Power by the relevant resolution authority.

The exercise of any resolution power or any suggestion of such exercise under the BRRD over the Guarantor could adversely affect the value of the Structured Products, and you may not be able to recover all or even part of the amount due under the Structured Products (if any). **You may therefore lose all or a substantial part of your investment in the Structured Products.**

In addition, the resolution powers could be exercised (i) prior to the commencement of any insolvency proceedings in respect of the Guarantor, and (ii) by the relevant resolution authorities without your consent or any prior notice to you. It is also uncertain how the relevant resolution authorities would assess triggering conditions in different pre-insolvency scenarios affecting the Guarantor under the BRRD. Accordingly, you may not be able to anticipate a potential exercise of any such resolution powers over the Guarantor and/or the Guarantee.

By investing in the Structured Products, you acknowledge, accept, consent and agree to be bound by the exercise of any Bail-In Power by the relevant resolution authorities

By investing in the Structured Products, you acknowledge, accept, consent and agree to be contractually bound by the exercise of any Bail-In Power by the relevant resolution authorities over the Guarantor. You further acknowledge, accept, consent and agree that your rights under the Guarantee are contractually subject to, and will be varied, if necessary, so as to give effect to, the exercise of any Bail-In Power by the relevant resolution authorities over the Guarantor. Accordingly, if any Bail-In Power is exercised over the Guarantor, you may not be able to recover all or even part of the amount due under the Structured Products (if any), or you may receive a different security issued by the Guarantor (or another person) in place of the amount due to you under the Structured Products (if any), which may be worth significantly less than the amount due to you under the Structured Products (if any). Moreover, the relevant resolution authorities may exercise the Bail-In Power without providing any advance notice to, or requiring your further consent. Please refer to the section headed "Text of the Guarantee of BNP Paribas" in this document for further details, in particular clause 6 of the Guarantee with respect to the Bail-In Power.

Financial Institutions (Resolution) Ordinance

The Financial Institutions (Resolution) Ordinance (Cap. 628, the Laws of Hong Kong) (the "**FIRO**") was enacted by the Legislative Council of Hong Kong in June 2016. The FIRO (except Part 8, section 192 and Division 10 of Part 15 thereof) came into operation on 7 July 2017.

The FIRO provides a regime for the orderly resolution of financial institutions with a view to avoiding or mitigating the risks otherwise posed by their non-viability to the stability and effective working of the financial system of Hong Kong, including the continued performance of critical financial functions. The FIRO seeks to provide the relevant resolution authorities with a range of powers to bring about timely and orderly resolution in order to stabilise and secure continuity for a failing authorised institution in Hong Kong. In particular, it is envisaged that subject to certain safeguards, the relevant resolution authority would be provided with powers to affect contractual and property rights as well as payments (including in respect of any priority of payment) that creditors would receive in resolution, including but not limited to powers to write off, or convert into equity, all or a part of the liabilities of the failing financial institution.

The Issuer is not subject to and bound by the FIRO. However, the Guarantor, as an authorised institution regulated by the Hong Kong Monetary Authority, is subject to and bound by the FIRO. The exercise of any resolution power by the relevant resolution authority under the FIRO in respect of the Guarantor may have a material adverse effect on the value of the Structured Products, and as a result, you may not be able to recover all or any amount due under the Structured Products.

TAXATION

The following section is of a general nature and is not intended to provide guidance to you. This section relates to you if you are the absolute beneficial owner of the Structured Products and may not apply equally to you. If you are in any doubt as to your tax position on purchase, ownership, transfer, holding or exercise of any Structured Product, you are strongly advised to consult your own tax advisers.

General

You may be required to pay stamp duties, taxes and other charges in accordance with the laws and practices of the country of purchase in addition to the issue price of each Structured Product.

Taxation in Hong Kong

The following paragraph, which is intended as a general guide only, is based on current law and practice in Hong Kong. It summarises certain aspects of taxation in Hong Kong which may be applicable to the Structured Products but is not purported to be a comprehensive description of all tax considerations which may be of relevance.

Profits Tax

No tax is payable in Hong Kong by withholding or otherwise in respect of:

(a) dividends of any company;

(b) distributions of any trust authorised as a collective investment scheme by the SFC under section 104 of the Securities and Futures Ordinance (Cap 571, The Laws of Hong Kong) or otherwise approved by the SFC; or

(c) any capital gains arising on the sale of the underlying shares or Structured Products, except that Hong Kong profits tax may be chargeable on any such gains in the case of certain persons carrying on a trade, profession or business in Hong Kong.

Stamp Duty

You do not need to pay any stamp duty in respect of purely cash settled Structured Products.

Taxation in the Netherlands

The following paragraph, which is intended as a general guide only, is based on current law and practice in the Netherlands. It summarises certain aspects of taxation in the Netherlands which may be applicable to the Structured Products but is not purported to be a comprehensive description of all tax considerations which may be of relevance.

Registration, Stamp, Transfer or Turnover Taxes

No Dutch registration, stamp, transfer or turnover taxes or other similar duties or taxes should be due in the Netherlands in direct connection with the offering and issue of the Structured Products by us or in respect of the signing and delivery of this document and/or the relevant launch announcement and supplemental listing document.

Withholding Tax

No Netherlands withholding tax should be due on payments of principal and/or interest.

Income Tax or Capital Gain Tax

You will not be subject to Netherlands taxes on income or capital gains in direct connection with the acquisition or holding of debt or any payment under the Structured Products or in respect of any gain realised on the disposal or redemption of the Structured Products, provided that:

(a) you are neither a resident nor deemed to be a resident nor has opted to be treated as a resident in the Netherlands; and

(b) you do not have an enterprise or an interest in an enterprise which, in whole or in part, is carried on through a permanent establishment or a permanent representative in the Netherlands and to which permanent establishment or permanent representative the Structured Products are attributable; and

(c) if you are a legal person, an open limited partnership ("*open commanditaire vennootschap*"), another company with a capital divided into shares or a special purpose fund ("*doelvermogen*"):

    (i) you do not have a substantial interest* in our share capital, or in the event that you do have such an interest, such interest forms part of the assets of an enterprise; and

    (ii) you do not have a deemed Netherlands enterprise to which enterprise the Structured Products are attributable, including but not limited to, activities such as serving as a management or supervisory board member of a Dutch resident company;

or

(d) if you are a natural person:

(i) you do not derive income and/or capital gains from activities in the Netherlands other than business income (as described under (b) above), to which activities the Structured Products are attributable; and

(ii) you or a person related to you by law, contract, consanguinity or affinity to the degree specified in the tax laws of the Netherlands do not have, or are not deemed to have, a substantial interest* in our share capital.

Inheritance Tax

No gift, estate or inheritance tax will arise in the Netherlands on the transfer by way of gift or inheritance of the Structured Products if the donor or the deceased at the time of the gift or the death is neither a resident nor a deemed resident of the Netherlands, unless:

(a) at the time of the gift or death, the Structured Products are attributable to an enterprise or part of an enterprise that is carried out through a permanent establishment or a permanent representative in the Netherlands; or

(b) the donor of the Structured Products dies within 180 days of making the gift, and is a Dutch resident or deemed resident on the date of death.

Furthermore, in relation to the implications in respect of registration, stamp, transfer or turnover taxes, withholding tax, income tax or capital gain tax and inheritance tax in the Netherlands summarised above, it is assumed that:

(a) neither the remuneration, nor the indebtedness of the remuneration, on the Structured Products is, in whole or in part, legally or actually, contingent upon the profits or the distribution of profits by us or any of our affiliated companies; and

(b) the Structured Products will be treated as our debt obligations and cannot, partly or wholly, be reclassified as equity nor actually function as equity for Dutch tax purposes as referred to in Section 10(1)(d) of the Dutch Corporate Income Tax Act (Wet op de vennootschapsbelasting 1969).

Exchange of Information

If we pay interest directly to, or secure our payment for the immediate benefit of, a holder of Structured Products that is (i) an individual, (ii) a resident of another EU Member State or designated jurisdiction and (iii) the beneficial owner of that interest, we must verify the holder of the Structured Products' identity and place of residence and provide information regarding that holders and the interest payments concerned to the Dutch tax authorities. This obligation does not apply if the interest is paid to, or secured for the benefit of, a holder of the Structured Products via a bank or other paying agent as defined in Dutch tax law. In that case similar or other obligations may apply with respect to the bank or the other paying agent.

* An interest in our share capital should not be considered as a substantial interest if you, and if you are a natural person, your spouse, registered partner, certain other relatives or certain persons sharing your household, do not own or hold, alone or together, whether directly or indirectly, the ownership of, or certain rights over, shares or rights resembling shares representing five per cent. or more of our total issued and outstanding capital or our issued and outstanding capital of any class of shares.

Taxation in the United States of America

Foreign Account Tax Compliance Act

Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986 ("**FATCA**") impose a new reporting regime and potentially a 30% withholding tax with respect to certain payments to (i) any non-U.S. financial institution (a "**foreign financial institution**", or "**FFI**" (as defined by FATCA)) that does not become a "**Participating FFI**" by entering into an agreement with the U.S. Internal Revenue Service ("**IRS**") to provide the IRS with certain information in respect of its account holders and investors or is not otherwise exempt from or in deemed compliance with FATCA and (ii) any investor (unless otherwise exempt from FATCA) that does not provide information sufficient to determine whether the investor is a U.S. person or should otherwise be treated as holding a "United States account" of the Issuer (a "**Recalcitrant Holder**"). The Issuer may be classified as an FFI.

The new withholding regime started being phased in beginning 1 July 2014 for payments from sources within the United States and will apply to "**foreign passthru payments**" (a term not yet defined) no earlier than two years after the date of publication in the Federal Register of final U.S. Treasury regulations defining such term. This withholding would potentially apply to payments in respect of (i) any Structured Products characterised as debt (or which are not otherwise characterised as equity and have a fixed term) for U.S. federal tax purposes that are issued on or after the "**grandfathering date**", which is the later of (a) 1 July 2014 and (b) the date that is six months after the date on which final U.S. Treasury regulations defining the term foreign passthru payment are filed with the Federal Register, or which are materially modified on or after the grandfathering date and (ii) any Structured Products characterised as equity or which do not have a fixed term for U.S. federal tax purposes, whenever issued. If Structured Products are issued before the grandfathering date, and additional Structured Products of the same series are issued on or after that date, the additional Structured Products may not be treated as grandfathered, which may have negative consequences for the existing Structured Products, including a negative impact on market price.

The United States and a number of other jurisdictions have negotiated intergovernmental agreements to facilitate the implementation of FATCA (each, an "**IGA**"). Pursuant to FATCA and the "Model 1" and "Model 2" IGAs released by the United States, an FFI in an IGA signatory country could be treated as a "**Reporting FI**" not subject to withholding under FATCA on any payments it receives. Further, an FFI in a Model 1 IGA jurisdiction generally would not be required to withhold under FATCA or an IGA (or any law implementing an IGA) (any such withholding being "**FATCA Withholding**") from payments it makes. The Model 2 IGA leaves open the possibility that a Reporting FI might in the future be required to withhold as a Participating FFI on foreign passthru payments and payments that it makes to Recalcitrant Holders. Under each Model IGA, a Reporting FI would still be required to report certain information in respect of its account holders and investors to its home government or to the IRS. The United States and The Netherlands have entered into an agreement (the "**US-Netherlands IGA**") based largely on the Model 1 IGA.

The Issuer expects to be treated as a Reporting FI pursuant to the US-Netherlands IGA and does not anticipate being obliged to deduct any FATCA Withholding on payments it makes. There can be no assurance, however, that the Issuer will be treated as a Reporting FI, or that it would in the future not be required to deduct FATCA Withholding from payments it makes. If the Issuer becomes a Participating FFI, the Issuer and financial institutions through which payments on the Structured Products are made may be required to withhold FATCA Withholding if (i) any FFI through or to which payment on such Structured Products is made is not a Participating FFI, a Reporting FI, or otherwise exempt from or in deemed compliance with FATCA or (ii) an investor is a Recalcitrant Holder.

Whilst the Structured Products are held within the clearing systems, it is expected that FATCA will not affect the amount of any payments made under, or in respect of, the Structured Products by the Issuer, the Guarantor or any paying agent, given that each of the entities in the payment chain between the Issuer and the participants in the clearing systems is a major financial institution whose business is dependent on compliance with FATCA and that any alternative approach introduced under an IGA will be unlikely to affect the Structured Products.

FATCA is particularly complex. The above description is based in part on regulations, official guidance and model IGAs, all of which are subject to change or may be implemented in a materially different form. Prospective investors should consult their tax advisers on how these rules may apply to the Issuer and to payments they may receive in connection with the Structured Products.

TO ENSURE COMPLIANCE WITH IRS CIRCULAR 230, EACH TAXPAYER IS HEREBY NOTIFIED THAT: (A) ANY TAX DISCUSSION HEREIN IS NOT INTENDED OR WRITTEN TO BE USED, AND CANNOT BE USED BY THE TAXPAYER FOR THE PURPOSE OF AVOIDING U.S. FEDERAL INCOME TAX PENALTIES THAT MAY BE IMPOSED ON THE TAXPAYER; (B) ANY SUCH TAX DISCUSSION WAS WRITTEN TO SUPPORT THE PROMOTION OR MARKETING OF THE TRANSACTIONS OR MATTERS ADDRESSED HEREIN; AND (C) THE TAXPAYER SHOULD SEEK ADVICE BASED ON THE TAXPAYER'S PARTICULAR CIRCUMSTANCES FROM AN INDEPENDENT TAX ADVISER.

PLACING AND SALE

General

No action has been or will be taken by us that would permit a public offering of any series of Structured Products or possession or distribution of any offering material in relation to the Structured Products in any jurisdiction (other than in Hong Kong) where action for that purpose is required.

No offers, sales or deliveries of any Structured Products, or distribution of any offering material relating to the Structured Products may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws or regulations and will not impose any obligation on us or the Guarantor. In the event that we contemplate a placing, placing fees may be payable in connection with any issue and we may, at our discretion, allow discounts to placees.

United States of America

Each series of Structured Products has not been, and will not be registered under the United States Securities Act of 1933, as amended (the "**Securities Act**"), and trading in the Structured Products has not been and will not be approved by the United States Commodity Futures Trading Commission under the United States Commodity Exchange Act, as amended. We have not been registered as an investment company pursuant to the United States Investment Company Act of 1940, as amended.

The Structured Products may not at any time be offered, sold, delivered, traded or exercised, directly or indirectly, in the United States or to, or for the account or benefit of, a U.S. person and a U.S. person may not, at any time, directly or indirectly, maintain a position in the Structured Products. Offers, sales, trading or delivery of the Structured Products in the United States or to, or for the account or benefit of, U.S. persons may constitute a violation of United States laws governing securities and commodities trading.

We will not offer, sell or deliver any Structured Products within the United States or to, or for the account or benefit of, U.S. persons, and all dealers participating in the distribution of the Structured Products will not be permitted by us to offer, sell, deliver or trade, at any time, directly or indirectly, any Structured Products in the United States or to, or for the account or benefit of, any U.S. person.

Each purchaser of Structured Products will be deemed by its acceptance of the Structured Products to have represented and agreed, on its behalf and on behalf of any investor accounts for which it is purchasing the Structured Products, that it has not and will not purchase, offer, sell, deliver or trade, at any time, directly or indirectly, any Structured Products in the United States or to, or for the account or benefit of, any U.S. person.

Each purchaser acknowledges that we and the dealers will rely upon the truth and accuracy of the foregoing representations and agreements, and agrees that if any of the representations or warranties deemed to have been made by such purchaser by its purchase of Structured Products are no longer accurate, it shall promptly notify us and the relevant dealer. If acquiring Structured Products as a fiduciary or agent for one or more investor accounts, each purchaser represents that it has sole investment discretion with respect to each such account and full power to make the foregoing representations and agreements on behalf of each such account.

Terms used herein, including, "**United States**" and "**U.S. person**", have the meanings given to them by Regulation S under the Securities Act.

European Economic Area

Each dealer represents and agrees that it has not offered, sold or otherwise made available and will not offer, sell, or otherwise make available any Structured Products which are the subject of the offering as contemplated by this base listing document to any retail investor in the European Economic Area. For the purposes of this provision:

a) the expression "**retail investor**" means a person who is one (or more) of the following:

   i. a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or

   ii. a customer within the meaning of Directive 2016/97/EU (as amended, the Insurance Distribution Directive), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or

   iii. not a qualified investor as defined in Directive 2003/71/EC (as amended, including by Directive 2010/73/EU, the Prospectus Directive); and

b) the expression "**offer**" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Structured Products to be offered so as to enable an investor to decide to purchase or subscribe the Structured Products.

United Kingdom

Each dealer has represented and agreed that:

(a) in respect to Structured Products having a maturity of less than one year: (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business; and (ii) it has not offered or sold and will not offer or sell any Structured Products other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Structured Products would otherwise constitute a contravention of Section 19 of Financial Services and Markets Act, as amended (the "**FSMA**") by the Issuer;

(b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received by it in connection with the issue or sale of any Structured Products in circumstances in which section 21(1) of the FSMA does not apply to the Issuer or the Guarantor; and

(c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Structured Products in, from or otherwise involving the United Kingdom.

TEXT OF THE GUARANTEE OF BNP PARIBAS

Our obligations under the Structured Products are guaranteed by the Guarantor under the Guarantee executed by the Guarantor by way of deed poll and dated as of 3 April 2019. The text of the Guarantee is set out below.

"THIS GUARANTEE is made by way of deed poll by BNP Paribas (the "**Guarantor**") in favour of the holders for the time being of the Structured Products (as defined below) (each a "**Holder**") and dated as of 3 April 2019. WHEREAS:–

(A) The Guarantor has agreed to guarantee all obligations of BNP Paribas Issuance B.V. (the "**Issuer**") under any structured products (including, without limitation, Warrants, callable bull/bear contracts ("**CBBC**") or other types of structured products) (together, the "**Structured Products**") pursuant to a base listing document dated 3 April 2019 ("**Base Listing Document**", which expression shall include any amendment and/or supplement thereto and any replacement or further issue of any base listing document issued by the Issuer from time to time in respect of Structured Products (and whether or not issued pursuant to any condition imposed by the Securities and Futures Commission pursuant to the Securities and Futures Ordinance or by The Stock Exchange of Hong Kong Limited (the "**Stock Exchange**") pursuant to the Rules Governing the Listing of Securities on the Stock Exchange)) and listed on the Stock Exchange.

(B) Terms defined in the Conditions of the Structured Products shall have the same meanings in this Deed of Guarantee except where the context requires otherwise. References to "Conditions" are to the terms and conditions set out in the Base Listing Document.

NOW THIS DEED WITNESSES as follows:

1 **Guarantee**: The Guarantor unconditionally and irrevocably guarantees by way of deed poll to each Holder that, if for any reason the Issuer does not pay any sum payable by it or perform any other obligation in respect of any Structured Product on the date specified for such payment or performance the Guarantor will, in accordance with the Conditions pay that sum in the currency in which such payment is due in immediately available funds or, as the case may be, perform or procure the performance of the relevant obligation on the due date for such performance. In case of the failure of the Issuer to satisfy such obligations as and when the same become due, the Guarantor hereby undertakes to make or cause to be made such payment or satisfy or cause to be satisfied such obligations as though the Guarantor were the principal obligor in respect of such obligation.

Any such payment in accordance with this Clause 1 shall constitute a complete discharge of the Guarantor's obligations in respect of such Structured Products.

2 **Guarantor as Principal Obligor**: As between the Guarantor and the holder of each Structured Product but without affecting the Issuer's obligations, the Guarantor will be liable under this Guarantee as if it were the sole principal obligor and not merely a surety. Accordingly, it will not be discharged, nor will its liability be affected, by anything which would not discharge it or affect its liability if it were the sole principal obligor (including (1) any time, indulgence, waiver or consent at any time given to the Issuer or any other person, (2) any amendment to any of the Conditions or to any security or other guarantee or indemnity, (3) the making or absence of any demand on the Issuer or any other person for payment or performance of any other obligation in respect of any Structured Product, (4) the enforcement or absence of enforcement of any Structured Product or of any security or other guarantee or indemnity, (5) the release of any such security, guarantee or indemnity, (6) the dissolution, amalgamation, reconstruction or reorganisation of the Issuer or any other person, or (7) the illegality, invalidity or unenforceability of or any defect in any provision of the Conditions or any of the Issuer's obligations under any of them).

3 **Guarantor's Obligations Continuing**: The Guarantor's obligations under this Guarantee are and will remain in full force and effect by way of continuing security until no sum remains payable and no other obligation remains to be performed under any Structured Product (in each case subject to its exercise). Furthermore, those obligations of the Guarantor are additional to, and not instead of, any security or other guarantee or indemnity at any time existing in favour of any person, whether from the Guarantor or otherwise. The Guarantor irrevocably waives all notices and demands of any kind.

4 **Discharge by the Issuer**: If any payment received by, or other obligation discharged to or to the order of, the holder of any Structured Product is, on the subsequent bankruptcy or insolvency of the Issuer, avoided under any laws relating to bankruptcy or insolvency, such payment or obligation will not be considered as having discharged or diminished the liability of the Guarantor and this Guarantee will continue to apply as if such payment or obligation had at all times remained owing due by the Issuer.

5 **Indemnity**: As a separate and alternative stipulation, the Guarantor unconditionally and irrevocably agrees (1) that any sum or obligation which, although expressed to be payable under the Structured Products, is for any reason (whether or not now existing and whether or not now known or becoming known to the Issuer, the Guarantor or the holder of any Structured Product) not recoverable from the Guarantor on the basis of a guarantee will nevertheless be recoverable from it as if it were the sole principal obligor and will be paid or performed by it in favour of the holder of any Structured Product and (2) as a primary obligation to indemnify each Holder against any loss suffered by it as a result of any sum or obligation expressed to be payable under the Structured Products not being paid or performed by the time, on the date and otherwise in the manner specified in the Structured Products or any obligation of the Issuer under the Structured Products being or becoming void, voidable or unenforceable for any reason (whether or not now existing and whether or not known or becoming known to the Issuer, the Guarantor or any Holder), in the case of a payment obligation the amount of that loss being the amount expressed to be payable by the Issuer in respect of the relevant sum, PROVIDED THAT the proviso to Clause 2 of this Guarantee shall apply mutatis mutandis to this Clause 5.

6 **Resolution proceeding against the Guarantor**: Each Holder acknowledges, accepts, consents and agrees by its acquisition of the Structured Products:

(a) to be bound by the effect of the exercise of the Bail-In Power by the relevant resolution authority if the latter were to consider that the amounts due under this Guarantee fall within the scope of the Bail-In Power. This Bail-In Power may include and result in any of the following, or some combination thereof:

(i) the reduction of all, or a portion, of the amounts due under this Guarantee;

(ii) the conversion of all, or a portion, of the amounts due under this Guarantee into shares, other securities or other obligations of the Guarantor or another person, including by means of an amendment, modification or variation of the terms of this Guarantee, in which case the Holder agrees to accept in lieu of its rights under this Guarantee any such shares, other securities or other obligations of the Guarantor or another person;

(iii) the cancellation of this Guarantee;

(iv) the amendment or alteration of the maturity of this Guarantee or amendment of the amount of interest payable on this Guarantee, or the date on which the interest becomes payable, including by suspending payment for a temporary period;

(b) if applicable, that the terms of this Guarantee are subject to, and may be varied, if necessary, to give effect to the exercise of the Bail-In Power by the relevant resolution authority.

For these purposes, the "**Bail-In Power**" is any resolution power existing from time to time under, and exercised in compliance with, any laws, regulations, rules or requirements in effect in France, whether relating to (i) the transposition of Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms (**BRRD**) as amended from time to time and as implemented under French law inter alia by the banking law dated 26 July 2013 regarding the separation and the regulation of banking activities *(Loi de séparation et de régulation des activités bancaires)* and by the Ordinance no. 2015-1024 dated 20 August 2015 *(Ordonnance no 2015-1024 du 20 août 2015 portant diverses dispositions d'adaptation de la législation au droit de l'Union européenne en matière financière) (the Ordinance)* published in the Official Journal on 21 August 2015, (ii) the Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010 ("**SRM**"), or (iii) otherwise arising under French law, and the instruments, rules and standards created thereunder, pursuant to which, in particular, the obligations of the Guarantor can be reduced (in part or in whole), cancelled, modified or converted into shares, other securities, or other obligations of such regulated entity or any other person.

A reference to the "**relevant resolution authority**" is to the *Autorité de contrôle prudentiel et de resolution* (**ACPR**) and/or any other authority entitled to exercise or participate in the exercise of any Bail-In Power against the Guarantor from time to time (including the Council of the European Union and the European Commission when acting pursuant to Article 18 of the SRM).

The matters set forth in this Clause 6 shall be exhaustive on the foregoing matters to the exclusion of any other agreements, arrangements or understandings between the Guarantor and any holder of a Structured Product.

7 **Incorporation of Terms:** The Guarantor agrees that it shall comply with and be bound by those provisions contained in the Conditions which relate to it.

8 **Deposit of Guarantee:** This Guarantee shall be deposited with and held by the Sponsor for the benefit of the Holders. If BNP Paribas Securities (Asia) Limited ceases to be the Sponsor its successor shall hold this Guarantee.

9 **Representations:** The Guarantor represents and warrants to each Holder that it has the full power and authority, and has taken all necessary steps, to execute and deliver this Guarantee and to perform its obligations hereunder and this Guarantee constitutes the valid and binding obligations of the Guarantor and is enforceable in accordance with its terms.

10 **Governing law:** This Guarantee shall be governed by and construed in accordance with the laws of Hong Kong.

11 **Jurisdiction:** The courts of Hong Kong are to have jurisdiction to settle any disputes which may arise out of or in connection with this Guarantee and accordingly any legal action or proceedings arising out of or in connection with this Guarantee ("**Proceedings**") may be brought in such courts. The Guarantor irrevocably submits to the jurisdiction of such courts and waives any objection to Proceedings in such courts whether on the ground of venue or on the ground that the Proceedings have been brought in an inconvenient forum. This submission is for the benefit of each of the Holders and shall not limit the right of any of them to take Proceedings in any other court of competent jurisdiction nor shall the taking of Proceedings in any one or more jurisdictions preclude the taking of Proceedings in any other jurisdiction (whether concurrently or not).

12 **Service of Process:** The Guarantor agrees that service of process in Hong Kong may be made on it at its Hong Kong branch. Nothing in this Guarantee shall affect the right to serve process in any other manner permitted by law.

IN WITNESS whereof this Guarantee has been executed by the Guarantor as a deed poll and delivered on the date specified below.

Dated as of 3 April 2019"

APPENDIX 1 — GENERAL CONDITIONS OF STRUCTURED PRODUCTS

These General Conditions relate to each series of Structured Products and must be read in conjunction with, and are subject to, the applicable Product Conditions and the Launch Announcement and Supplemental Listing Document in relation to the particular series of Structured Products. These General Conditions and the applicable Product Conditions (as supplemented, amended, modified and/or replaced by the relevant Launch Announcement and Supplemental Listing Document) together constitute the Conditions of the relevant Structured Products, and will be endorsed on the Global Certificate representing the relevant Structured Products. The Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Structured Products may specify other terms and conditions which shall, to the extent so specified or to the extent they are inconsistent with these General Conditions and the applicable Product Conditions, replace or modify the General Conditions and/or the applicable Product Conditions for the purpose of such series of Structured Products.

1. Definitions

"**Base Listing Document**" means the base listing document relating to Structured Products dated 3 April 2019 and issued by the Issuer, including any addenda to such base listing document issued from time to time;

"**Board Lot**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**CCASS**" means the Central Clearing and Settlement System established and operated by HKSCC;

"**CCASS Rules**" means the General Rules of CCASS and the CCASS Operational Procedures in effect from time to time;

"**Conditions**" means, in respect of a particular series of Structured Products, these General Conditions and the applicable Product Conditions;

"**Expiry Date**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**General Conditions**" means these general terms and conditions;

"**Global Certificate**" means, in respect of the relevant Structured Products, a global certificate registered in the name of the Nominee;

"**Guarantee**" means a deed poll guarantee dated as of 3 April 2019 made by the Guarantor;

"**Guarantor**" means BNP Paribas;

"**HKSCC**" means Hong Kong Securities and Clearing Company Limited;

"**Holder**" means, in respect of each series of Structured Products, each person who is for the time being shown in the Register as the holder of the Structured Products, and who shall be treated by the Issuer, the Guarantor and the Sponsor as the absolute owner and holder of the relevant Structured Products. The expression "**Holders**" shall be construed accordingly;

"**Hong Kong**" means the Hong Kong Special Administrative Region of the People's Republic of China;

"**Instrument**" means an instrument by way of deed poll dated 3 May 2006 executed by the Issuer which constitutes the Structured Products;

"**Issuer**" means BNP Paribas Issuance B.V.;

"**Launch Announcement and Supplemental Listing Document**" means the launch announcement and supplemental listing document relating to a particular series of Structured Products;

"**Nominee**" means HKSCC Nominees Limited (or such other nominee company as may be used by the HKSCC from time to time) in relation to the provision of nominee services to persons admitted for the time being by the HKSCC as a participant of CCASS;

"**Product Conditions**" means the product conditions relating to a particular series of Structured Products;

"**Register**" means, in respect of each series of Structured Products, the register of holders of such series of Structured Products kept by the Issuer outside of Hong Kong pursuant to General Condition 3.3;

"**Sponsor**" means BNP Paribas Securities (Asia) Limited;

"**Stock Exchange**" means The Stock Exchange of Hong Kong Limited; and

"**Structured Products**" means derivative warrants ("**Warrants**"), callable bull/bear contracts ("**CBBCs**") or such other structured products to be issued by the Issuer from time to time. References to "**Structured Product**" are to be construed as references to a particular series of Structured Products.

Other capitalised terms will, unless otherwise defined, have the meanings given to them in the Base Listing Document, the applicable Product Conditions, the relevant Launch Announcement and Supplemental Listing Document and/or the Global Certificate.

2. Form, Status, Transfer and Trading

2.1 ***Form***

The Structured Products (which expression shall, unless the context otherwise requires, include any further structured products issued pursuant to General Condition 9) are issued in registered form subject to and with the benefit of the Instrument and the Guarantee. Copies of the Instrument and the Guarantee are available for inspection at the specified offices of the Sponsor. The Holders are entitled to the benefit of, are bound by, and are deemed to have notice of all the provisions of the Instrument.

2.2 ***Status of the Issuer's obligations***

The settlement obligations of the Issuer in respect of the Structured Products represent general unsecured contractual obligations of the Issuer and of no other person and rank, and will rank, pari passu among themselves and with all other present and future unsecured and unsubordinated contractual obligations of the Issuer, except for obligations accorded preference by mandatory provisions of applicable law. The obligations of the Guarantor under the Guarantee represent general unsecured contractual obligations of the Guarantor and of no other person and rank, and will rank, pari passu with all other present and future unsecured and unsubordinated contractual obligations of the Guarantor, except for obligations accorded preference by mandatory provisions of applicable law.

2.3 ***Transfer and Trading of Structured Products***

Transfers of Structured Products may be effected only in Board Lots or integral multiples thereof in CCASS in accordance with the CCASS Rules.

Trading in Structured Products on the Stock Exchange shall cease prior to the Expiry Date in accordance with the requirements of the Stock Exchange.

3. Sponsor and Register

3.1 The Sponsor will not assume any obligation or duty to or any relationship or agency or trust for the Holder.

3.2 The Issuer reserves the right, subject to the appointment of a successor, at any time to vary or terminate the appointment of the initial Sponsor and to appoint another sponsor provided that it will at all times maintain a sponsor in Hong Kong for so long as the Structured Products are listed on the Stock Exchange. Notice of any such termination or appointment will be given to the Holders in accordance with General Condition 7.

3.3 The Register will be maintained outside Hong Kong by the Issuer and the Issuer will enter or cause to be entered the name, address and banking details of the Holders, the details of the Structured Products held by each Holder, including the number of Structured Products of each series held and any other particulars which it thinks proper.

4. Purchases

The Issuer, the Guarantor and/or any of their respective affiliates may at any time purchase Structured Products at any price in the open market or by tender or by private treaty. Any Structured Products so purchased may be held, resold or surrendered for cancellation.

5. Global Certificate

The Structured Products will be represented by a Global Certificate. No definitive certificate will be issued. The Structured Products can only be exercised by the Nominee. The Global Certificate representing the relevant Structured Products will be deposited with CCASS in the name of the Nominee. The Global Certificate must be executed manually on behalf of the Issuer by its authorised person(s) or attorney(s).

6. Meetings of Holders and Modification

6.1 *Meetings of Holders*

The Instrument contains provisions for convening meetings of the Holders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Instrument) of a modification of the provisions of the Structured Products or of the Instrument.

Any resolution to be passed in a meeting of the Holders shall be decided by poll. A meeting may be convened by the Issuer or by Holders holding not less than 10 per cent. of the Structured Products for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the Structured Products for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing Holders whatever the number of Structured Products so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such Holders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Holders shall be binding on all the Holders, whether or not they are present at the meeting.

Resolutions can be passed in writing without a meeting of the Holders being held if passed unanimously.

6.2 *Modification*

The Issuer may, without the consent of the Holders, effect any modification of the terms and conditions of the Structured Products or the Instrument which, in the opinion of the Issuer, is:

(a) not materially prejudicial to the interests of the Holders generally (without considering the circumstances of any individual Holder or the tax or other consequences of such modification in any particular jurisdiction);

(b) of a formal, minor or technical nature;

(c) made to correct a manifest error; or

(d) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Any such modification shall be binding on the Holders and shall be notified to them by the Issuer or the Sponsor (as the case may be) as soon as practicable thereafter in accordance with General Condition 7.

7. Notices

All notices to the Holders will be validly given if published in English and in Chinese on the website of Hong Kong Exchanges and Clearing Limited. Such notices shall be deemed to have been given on the date of the first such publication. If such publication is not practicable, notice will be given in such other manner as the Issuer may determine appropriate.

8. Adjustment to the Conditions

8.1 *Other Adjustments*

Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the Structured Products as appropriate where any event (including the events as contemplated in the applicable Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Conditions, provided that such adjustment is:

(a) not materially prejudicial to the interests of the Holders generally (without considering the circumstances of any individual Holder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(b) determined by the Issuer in good faith to be appropriate and commercially reasonable.

8.2 *Notice of Adjustments*

All determinations made by the Issuer in respect of any adjustment to the Conditions will be conclusive and binding on the Holders. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment and of the date from which such adjustment is effective by publication in accordance with General Condition 7.

9. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the Holders, to create and issue further structured products so as to form a single series with the Structured Products.

10. Taxation

The Issuer is not liable for or otherwise obliged to pay any tax, duty, withholding or other payment which may arise as a result of the ownership, transfer or exercise of any Structured Products.

11. Good Faith and Commercially Reasonable Manner

Any exercise of discretion by the Issuer under the Conditions will be made in good faith and in a commercially reasonable manner.

12. Contracts (Rights of Third Parties) Ordinance

A person who is not a party to the Conditions has no right under the Contracts (Rights of Third Parties) Ordinance (Cap. 623 of the Laws of Hong Kong) to enforce or to enjoy the benefit of any term of the Structured Products.

13. Governing Law

The Structured Products, the Global Certificate, the Guarantee and the Instrument will be governed by and construed in accordance with the laws of Hong Kong. The Issuer, the Guarantor and each Holder (by its purchase of the Structured Products) shall be deemed to have submitted for all purposes in connection with the Structured Products, the Global Certificates, the Guarantee and the Instrument to the non-exclusive jurisdiction of the courts of Hong Kong.

14. Language

In the event of any inconsistency between (a) the Chinese translation of these General Conditions and/or the applicable Product Conditions and (b) the English version of these General Conditions and/or the applicable Product Conditions, the English version of these General Conditions and/or the applicable Product Conditions shall prevail.

15. Prescription

Claims against the Issuer for payment of any amount in respect of a series of Structured Product will become void unless made within ten years of the MCE Valuation Date or the Expiry Date (as the case may be) applicable to that series and thereafter, any sums payable in respect of such Structured Product shall be forfeited and shall revert to the Issuer.

Sponsor

BNP Paribas Securities (Asia) Limited
59th-63rd Floors
Two International Finance Centre
8 Finance Street
Central, Hong Kong

APPENDIX 2 — PRODUCT CONDITIONS OF WARRANTS

The following pages set out the Product Conditions in respect of different types of Warrants.

PART A — PRODUCT CONDITIONS OF CASH SETTLED WARRANTS OVER SINGLE EQUITIES

The relevant Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Warrants may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the applicable Product Conditions, replace or modify the applicable Product Conditions for the purpose of such series of Warrants. Capitalised terms used in the applicable Product Conditions and not otherwise defined therein shall have the meaning given to them in the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Average Price**" means the arithmetic mean of the closing price of one Share, as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustment to such closing prices as may be necessary to reflect any event as contemplated in Product Condition 4 such as capitalisation, rights issue, distribution or the like in respect of each Valuation Date;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means, in respect of every Board Lot, an amount in the Settlement Currency calculated by the Issuer as follows:

(a) in the case of a series of call Warrants:

$$\frac{\text{Entitlement x (Average Price – Exercise Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

(b) in the case of a series of put Warrants:

$$\frac{\text{Entitlement x (Exercise Price – Average Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the CCASS Rules, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Company**" means the company specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred in respect of the exercise of the Warrants;

"**Exercise Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**General Conditions**" means the general terms and conditions set out in Appendix 1 of the Base Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(a) the occurrence or existence on any Valuation Date during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in (i) the Shares; or (ii) any options or futures contracts relating to the Shares if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(b) the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued; or

(c) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Number of Warrant(s) per Entitlement**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Product Conditions**" means these product terms and conditions;

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the later of: (i) the Expiry Date; and (ii) the day on which the Average Price is determined in accordance with the Conditions;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment of the Cash Settlement Amount electronically through CCASS to the Designated Bank Account;

"**Share**" means the share of the Company specified as such in the relevant Launch Announcement and Supplemental Listing Document and "**Shares**" shall be construed accordingly; and

"**Valuation Date**" means each of the five Business Days immediately preceding the Expiry Date, provided that if the Issuer determines, in its sole discretion, that a Market Disruption Event has occurred on any Valuation Date, then that Valuation Date shall be postponed until the first succeeding Business Day on which there is no Market Disruption Event irrespective of whether that postponed Valuation Date would fall on a Business Day that is already or is deemed to be a Valuation Date. For the avoidance of doubt, in the event that a Market Disruption Event has occurred and a Valuation Date is postponed as aforesaid, the closing price of the Shares on the first succeeding Business Day will be used more than once in determining the Average Price, so that in no event shall there be less than five closing prices used to determine the Average Price.

If the postponement of the Valuation Date as aforesaid would result in the Valuation Date falling on or after the Expiry Date, then:

(a) the Business Day immediately preceding the Expiry Date (the "**Last Valuation Date**") shall be deemed to be the Valuation Date notwithstanding the Market Disruption Event; and

(b) the Issuer shall determine the closing price of the Shares on the basis of its good faith estimate of the price that would have prevailed on the Last Valuation Date but for the Market Disruption Event.

Other capitalised terms shall, unless otherwise defined herein, have the meaning ascribed to them in the Base Listing Document, the General Conditions, the relevant Launch Announcement and Supplemental Listing Document or the Global Certificate.

2. Warrant Rights and Exercise Expenses

2.1 *Warrant Rights*

Every Board Lot gives each Holder, upon due exercise and compliance with Product Condition 3, the right to receive payment of the Cash Settlement Amount, if any.

2.2 *Exercise Expenses*

On exercise of the Warrants, Holders will be obliged to give an irrevocable authorisation to the Issuer to deduct all Exercise Expenses in accordance with Product Condition 3.

3. Exercise of Warrants

(a) Exercise of Warrants in Board Lots

Warrants may only be exercised in Board Lots or integral multiples thereof.

(b) Automatic Exercise

The Warrants are exercisable only on the Expiry Date. Any Warrant will automatically be exercised if the Cash Settlement Amount on the Expiry Date is greater than zero (without notice being given to the Holders). The Holders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Holders the Cash Settlement Amount (net of any Exercise Expenses)(if any) in accordance with Product Condition 3(d).

Any Warrant which has not been automatically exercised in accordance with this Product Condition 3(b) shall expire immediately without value thereafter and all rights of the Holder and obligations of the Issuer with respect to such Warrant shall cease.

(c) Cancellation

The Issuer will, with effect from the first Business Day following the Expiry Date, remove from the Register the name of the person in respect of the Warrants which:

(i) are the subject of an exercise pursuant to automatic exercise in accordance with these Product Conditions; or

(ii) have expired worthless,

and thereby cancel the relevant Warrants.

(d) Cash Settlement

Subject to automatic exercise of Warrants in accordance with these Product Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Holder equal to the Cash Settlement Amount (net of any Exercise Expenses). If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable by the Issuer.

The Cash Settlement Amount (net of any Exercise Expenses) will be despatched no later than the Settlement Date by crediting that amount, in accordance with the CCASS Rules, to the Designated Bank Account.

If, as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

4. Adjustments

4.1 *Rights Issues*

If and whenever the Company shall, by way of Rights (as defined below), offer new Shares for subscription at a fixed subscription price to the holders of existing Shares pro rata to existing holdings (a "**Rights Offer**"), the Entitlement will be adjusted to take effect on the Business Day ("**Rights Issue Adjustment Date**") on which trading in the Shares becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E : Existing Entitlement immediately prior to the Rights Offer

S : Cum-Rights Share price determined by the closing price on the Stock Exchange on the last Business Day on which Shares are traded on a cum-Rights basis

R : Subscription price per Share as specified in the Rights Offer plus an amount equal to any dividends or other benefits foregone to exercise the Rights

M : Number of new Share(s) (whether a whole or a fraction) per existing Share each holder thereof is entitled to subscribe

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Rights Issue Adjustment Date.

For the purposes of these Product Conditions:

"**Rights**" means the right(s) attached to each existing Share or needed to acquire one new Share (as the case may be) which are given to the holders of existing Shares to subscribe at a fixed subscription price for new Shares pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

4.2 *Bonus Issues*

If and whenever the Company shall make an issue of Shares credited as fully paid to the holders of Shares generally by way of capitalisation of profits or reserves (other than pursuant to a scrip dividend or similar scheme for the time being operated by the Company or otherwise in lieu of a cash dividend and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement will be increased on the Business Day ("**Bonus Issue Adjustment Date**") on which trading in the Shares becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = 1 + N$$

E : Existing Entitlement immediately prior to the Bonus Issue

N : Number of additional Shares (whether a whole or a fraction) received by a holder of existing Shares for each Share held prior to the Bonus Issue

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Bonus Issue Adjustment Date.

4.3 ***Share Splits or Consolidations***

If and whenever the Company shall subdivide its Shares or any class of its outstanding share capital comprised of the Shares into a greater number of shares (a "**Subdivision**") or consolidate the Shares or any class of its outstanding share capital comprised of the Shares into a smaller number of shares (a "**Consolidation**"), then:

(i) in the case of a Subdivision, the Entitlement in effect immediately prior thereto will be increased whereas the Exercise Price (which shall be rounded to the nearest 0.001) will be decreased in the same ratio as the Subdivision; and

(ii) in the case of a Consolidation, the Entitlement in effect immediately prior thereto will be decreased whereas the Exercise Price (which shall be rounded to the nearest 0.001) will be increased in the same ratio as the Consolidation,

in each case on the day on which the Subdivision or Consolidation (as the case may be) shall have taken effect.

4.4 ***Merger or Consolidation***

If it is announced that the Company is to or may merge or consolidate with or into any other corporation (including becoming, by agreement or otherwise, a subsidiary of any corporation or controlled by any person or corporation) (except where the Company is the surviving corporation in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the Warrants may in the absolute discretion of the Issuer be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion).

The rights attaching to the Warrants after the adjustment shall, after such Restructuring Event, relate to the number of shares of the corporation(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Shares, as the case may be, to which the holder of such number of Shares to which the Warrants related immediately before such Restructuring Event would have been entitled upon such Restructuring Event. Thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer, be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected.

For the avoidance of doubt, any remaining Shares shall not be affected by this Product Condition 4.4 and, where cash is offered in substitution for Shares or is deemed to replace Substituted Securities as described above, references in these Product Conditions to the Shares shall include any such cash.

4.5 ***Cash Distribution***

No adjustment will be made for an ordinary cash dividend (whether or not it is offered with a scrip alternative) ("**Ordinary Dividend**"). For any other forms of cash distribution ("**Cash Distribution**") announced by the Company, such as a cash bonus, special dividend or extraordinary dividend, no adjustment will be made unless the value of the Cash Distribution accounts for 2 per cent. or more of the Share's closing price on the day of announcement by the Company.

If and whenever the Company shall make a Cash Distribution credited as fully paid to the holders of Shares generally, the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Shares becomes ex-entitlement in respect of the relevant Cash Distribution ("**Cash Distribution Adjustment Date**") in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

E : Existing Entitlement immediately prior to the Cash Distribution

S : The closing price of the Share on the Stock Exchange on the Business Day immediately preceding the Cash Distribution Adjustment Date

CD : The Cash Distribution per Share

OD : The Ordinary Dividend per Share, provided that the date on which the Shares are traded on an ex-Ordinary Dividend basis is the Cash Distribution Adjustment Date. For the avoidance of doubt, the OD shall be zero if the date on which the Shares are traded on an ex-Ordinary Dividend basis is not the Cash Distribution Adjustment Date

In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Cash Distribution Adjustment Date.

5. Liquidation

In the event of a liquidation or dissolution of the Company or the appointment of a liquidator, receiver or administrator or analogous person under Hong Kong law in respect of the whole or substantially the whole of its undertaking, property or assets, all unexercised Warrants will lapse and shall cease to be valid for any purpose, in the case of voluntary liquidation, on the effective date of the relevant resolution and, in the case of an involuntary liquidation or dissolution, on the date of the relevant court order or, in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of its undertaking, property or assets, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of law.

6. Delisting

6.1 ***Adjustments following delisting***

If at any time the Shares cease to be listed on the Stock Exchange, the Issuer shall give effect to these Product Conditions in such manner and make such adjustments to the rights attaching to the Warrants as it shall, in its absolute discretion, consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Holders generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of any Holder or the tax or other consequences that may result in any particular jurisdiction).

6.2 ***Listing on another exchange***

Without prejudice to the generality of Product Condition 6.1, where the Shares are, or, upon the delisting, become, listed on any other stock exchange, these Product Conditions may, in the absolute discretion of the Issuer, be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Holders, make such adjustments to the entitlements of Holders on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

7. Illegality or Impracticability

The Issuer is entitled to terminate the Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Warrants, or for the Guarantor to perform its obligations under the Guarantee, in whole or in part as a result of:

  (i) the adoption of, or any change in, any relevant law or regulation (including any tax law); or

  (ii) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law),

  (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by the applicable law or regulation, pay to each Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Warrant held by such Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement as determined by the Issuer in its sole and absolute discretion. Payment will be made to each Holder in such manner as shall be notified to the Holder in accordance with General Condition 7.

Sponsor

BNP Paribas Securities (Asia) Limited
59th-63rd Floors
Two International Finance Centre
8 Finance Street
Central, Hong Kong

PART B — PRODUCT CONDITIONS OF CASH SETTLED WARRANTS OVER SINGLE UNIT TRUST

The relevant Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Warrants may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the applicable Product Conditions, replace or modify the applicable Product Conditions for the purpose of such series of Warrants. Capitalised terms used in the applicable Product Conditions and not otherwise defined therein shall have the meaning given to them in the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Average Price**" means the arithmetic mean of the closing price of one Unit, as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustment to such closing prices as may be necessary to reflect any event as contemplated in Product Condition 4 such as capitalisation, rights issue, distribution or the like in respect of each Valuation Date;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means, in respect of every Board Lot, an amount in the Settlement Currency calculated by the Issuer as follows:

(a) in the case of a series of call Warrants:

$$\frac{\text{Entitlement x (Average Price – Exercise Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

(b) in the case of a series of put Warrants:

$$\frac{\text{Entitlement x (Exercise Price – Average Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the CCASS Rules, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred in respect of the exercise of the Warrants;

"**Exercise Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**General Conditions**" means the general terms and conditions set out in Appendix 1 of the Base Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(a) the occurrence or existence on any Valuation Date during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in (i) the Units; or (ii) any options or futures contracts relating to the Units if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(b) the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued; or

(c) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Number of Warrant(s) per Entitlement**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Product Conditions**" means these product terms and conditions;

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the later of (i) the Expiry Date and (ii) the day on which the Average Price is determined in accordance with the Conditions;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment of the Cash Settlement Amount electronically through CCASS to the Designated Bank Account;

"**Trust**" means the trust specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Unit**" means the unit specified as such in the relevant Launch Announcement and Supplemental Listing Document and "**Units**" shall be construed accordingly; and

"**Valuation Date**" means each of the five Business Days immediately preceding the Expiry Date, provided that if the Issuer determines, in its sole discretion, that a Market Disruption Event has occurred on any Valuation Date, then that Valuation Date shall be postponed until the first succeeding Business Day on which there is no Market Disruption Event irrespective of whether that postponed Valuation Date would fall on a Business Day that is already or is deemed to be a Valuation Date. For the avoidance of doubt, in the event that a Market Disruption Event has occurred and a Valuation Date is postponed as aforesaid, the closing price of the Units on the first succeeding Business Day will be used more than once in determining the Average Price, so that in no event shall there be less than five closing prices used to determine the Average Price.

If the postponement of the Valuation Date as aforesaid would result in the Valuation Date falling on or after the Expiry Date, then:

(a) the Business Day immediately preceding the Expiry Date (the "**Last Valuation Date**") shall be deemed to be the Valuation Date notwithstanding the Market Disruption Event; and

(b) the Issuer shall determine the closing price of the Units on the basis of its good faith estimate of the price that would have prevailed on the Last Valuation Date but for the Market Disruption Event.

Other capitalised terms shall, unless otherwise defined herein, have the meaning ascribed to them in the Base Listing Document, the General Conditions, the relevant Launch Announcement and Supplemental Listing Document or the Global Certificate.

2. Warrant Rights and Exercise Expenses

2.1 ***Warrant Rights***

Every Board Lot gives each Holder, upon due exercise and compliance with Product Condition 3, the right to receive payment of the Cash Settlement Amount, if any.

2.2 ***Exercise Expenses***

On exercise of the Warrants, Holders will be obliged to give an irrevocable authorisation to the Issuer to deduct all Exercise Expenses in accordance with Product Condition 3.

3. Exercise of Warrants

(a) Exercise of Warrants in Board Lots

Warrants may only be exercised in Board Lots or integral multiples thereof.

(b) Automatic Exercise

The Warrants are exercisable only on the Expiry Date. Any Warrant will automatically be exercised if the Cash Settlement Amount on the Expiry Date is greater than zero (without notice being given to the Holders). The Holders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Holders the Cash Settlement Amount (net of any Exercise Expenses)(if any) in accordance with Product Condition 3(d).

Any Warrant which has not been automatically exercised in accordance with this Product Condition 3(b) shall expire immediately without value thereafter and all rights of the Holder and obligations of the Issuer with respect to such Warrant shall cease.

(c) Cancellation

The Issuer will, with effect from the first Business Day following the Expiry Date, remove from the Register the name of the person in respect of the Warrants which:

(i) are the subject of an exercise pursuant to automatic exercise in accordance with these Product Conditions; or

(ii) have expired worthless,

and thereby cancel the relevant Warrants.

(d) Cash Settlement

Subject to automatic exercise of Warrants in accordance with these Product Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Holder equal to the Cash Settlement Amount (net of any Exercise Expenses). If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable by the Issuer.

The Cash Settlement Amount (net of any Exercise Expenses) will be despatched no later than the Settlement Date by crediting that amount, in accordance with the CCASS Rules, to the Designated Bank Account.

If, as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

4. Adjustments

4.1 *Rights Issues*

If and whenever the Trust shall, by way of Rights (as defined below), offer new Units for subscription at a fixed subscription price to the holders of existing Units pro rata to existing holdings (a "**Rights Offer**"), the Entitlement will be adjusted to take effect on the Business Day ("**Rights Issue Adjustment Date**") on which trading in the Units becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E : Existing Entitlement immediately prior to the Rights Offer

S : Cum-Rights Unit price determined by the closing price on the Stock Exchange on the last Business Day on which Units are traded on a cum-Rights basis

R : Subscription price per Unit as specified in the Rights Offer plus an amount equal to any distribution or other benefits foregone to exercise the Rights

M : Number of new Unit(s) (whether a whole or a fraction) per existing Unit each holder thereof is entitled to subscribe

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Rights Issue Adjustment Date.

For the purposes of these Product Conditions:

"**Rights**" means the right(s) attached to each existing Unit or needed to acquire one new Unit (as the case may be) which are given to the holders of existing Units to subscribe at a fixed subscription price for new Units pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

4.2 *Bonus Issues*

If and whenever the Trust shall make an issue of Units credited as fully paid to the holders of Units generally (other than pursuant to a scrip distribution or similar scheme for the time being operated by the Trust or otherwise in lieu of a cash distribution and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement will be increased on the Business Day ("**Bonus Issue Adjustment Date**") on which trading in the Units becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = 1 + N$$

E : Existing Entitlement immediately prior to the Bonus Issue

N : Number of additional Units (whether a whole or a fraction) received by a holder of existing Units for each Unit held prior to the Bonus Issue

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Bonus Issue Adjustment Date.

4.3 ***Subdivisions or Consolidations***

If and whenever the Trust shall subdivide its Units or any class of its outstanding Unit into a greater number of units (a "**Subdivision**") or consolidate the Units or any class of its outstanding unit capital comprised of the Units into a smaller number of units (a "**Consolidation**"), then:

(i) in the case of a Subdivision, the Entitlement in effect immediately prior thereto will be increased whereas the Exercise Price (which shall be rounded to the nearest 0.001) will be decreased in the same ratio as the Subdivision; and

(ii) in the case of a Consolidation, the Entitlement in effect immediately prior thereto will be decreased whereas the Exercise Price (which shall be rounded to the nearest 0.001) will be increased in the same ratio as the Consolidation,

in each case on the day on which the Subdivision or Consolidation (as the case may be) shall have taken effect.

4.4 ***Merger or Consolidation***

If it is announced that the Trust is to or may merge with or into any other trust or consolidate with or into any other trust or corporation (including becoming, by agreement or otherwise, controlled by any person or corporation) (except where the Trust is the surviving entity in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the Warrants may in the absolute discretion of the Issuer be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion).

The rights attaching to the Warrants after the adjustment shall, after such Restructuring Event, relate to the number of units of the trust(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Units, as the case may be, to which the holder of such number of Units to which the Warrants related immediately before such Restructuring Event would have been entitled upon such Restructuring Event. Thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer, be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected.

For the avoidance of doubt, any remaining Units shall not be affected by this Product Condition 4.4 and, where cash is offered in substitution for Units or is deemed to replace Substituted Securities as described above, references in these Product Conditions to the Units shall include any such cash.

4.5 ***Cash Distribution***

No adjustment will be made for an ordinary cash distribution (whether or not it is offered with a scrip alternative) ("**Ordinary Distribution**"). For any other forms of cash distribution ("**Cash Distribution**") announced by the Trust, such as a cash bonus, special distribution or extraordinary distribution, no adjustment will be made unless the value of the Cash Distribution accounts for 2 per cent. or more of the Unit's closing price on the day of announcement by the Trust.

If and whenever the Trust shall make a Cash Distribution credited as fully paid to the holders of Units generally, the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Units becomes ex-entitlement in respect of the relevant Cash Distribution ("**Cash Distribution Adjustment Date**") in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

E : Existing Entitlement immediately prior to the Cash Distribution

S : The closing price of the Unit on the Stock Exchange on the Business Day immediately preceding the Cash Distribution Adjustment Date

CD : The Cash Distribution per Unit

OD : The Ordinary Distribution per Unit, provided that the date on which the Units are traded on an ex-Ordinary Distribution basis is the Cash Distribution Adjustment Date. For the avoidance of doubt, the OD shall be zero if the date on which the Units are traded on an ex-Ordinary Distribution basis is not the Cash Distribution Adjustment Date

In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Cash Distribution Adjustment Date.

5. Termination or Liquidation

In the event of a Termination or the liquidation or dissolution of the trustee of the Trust (including any successor trustee appointed from time to time) ("**Trustee**") (in its capacity as trustee of the Trust) or the appointment of a liquidator, receiver or administrator or analogous person under Hong Kong law in respect of the whole or substantially the whole of the Trustee's undertaking, property or assets, all unexercised Warrants will lapse and shall cease to be valid for any purpose. In the case of a Termination, the unexercised Warrants will lapse and shall cease to be valid on the effective date of the Termination, in the case of a voluntary liquidation, on the effective date of the relevant resolution and, in the case of an involuntary liquidation or dissolution, on the date of the relevant court order or, in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of its undertaking, property or assets, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of law.

For the purpose of this Product Condition 5, "**Termination**" means (i) the Trust is terminated, or the Trustee or the manager of the Trust (including any successor manager appointed from time to time) ("**Manager**") is required to terminate the Trust under the trust deed ("**Trust Deed**") constituting the Trust or applicable law, or the termination of the Trust commences; (ii) the Trust is held or is conceded by the Trustee or the Manager not to have been constituted or to have been imperfectly constituted; (iii) the Trustee ceases to be authorised under the Trust to hold the property of the Trust in its name and perform its obligations under the Trust Deed; or (iv) the Trust ceases to be authorised as an authorised collective investment scheme under the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong).

6. Delisting

6.1 ***Adjustments following delisting***

If at any time the Units cease to be listed on the Stock Exchange, the Issuer shall give effect to these Product Conditions in such manner and make such adjustments to the rights attaching to the Warrants as it shall, in its absolute discretion, consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Holders generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of any Holder or the tax or other consequences that may result in any particular jurisdiction).

6.2 ***Listing on another exchange***

Without prejudice to the generality of Product Condition 6.1, where the Units are, or, upon the delisting, become, listed on any other stock exchange, these Product Conditions may, in the absolute discretion of the Issuer, be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Holders, make such adjustments to the entitlements of Holders on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

7. Illegality or Impracticability

The Issuer is entitled to terminate the Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Warrants, or for the Guarantor to perform its obligations under the Guarantee, in whole or in part as a result of:

   (i) the adoption of, or any change in, any relevant law or regulation (including any tax law); or

   (ii) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law),

   (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by the applicable law or regulation, pay to each Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Warrant held by such Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement as determined by the Issuer in its sole and absolute discretion. Payment will be made to each Holder in such manner as shall be notified to the Holder in accordance with General Condition 7.

Sponsor

BNP Paribas Securities (Asia) Limited
59th-63rd Floors
Two International Finance Centre
8 Finance Street
Central, Hong Kong

PART C — PRODUCT CONDITIONS OF CASH SETTLED INDEX WARRANTS

The relevant Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Warrants may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the applicable Product Conditions, replace or modify the applicable Product Conditions for the purpose of such series of Warrants. Capitalised terms used in the applicable Product Conditions and not otherwise defined therein shall have the meaning given to them in the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means, for every Board Lot, an amount calculated by the Issuer as follows (and, if appropriate, either (i) converted (if applicable) into the Settlement Currency at the Exchange Rate or, as the case may be, (ii) converted into the Interim Currency at the First Exchange Rate and then (if applicable) converted into Settlement Currency at the Second Exchange Rate):

(a) in the case of a series of call Warrants:

$$\frac{(\text{Closing Level} - \text{Strike Level}) \text{ x one Board Lot x Index Currency Amount}}{\text{Divisor}}$$

(b) in the case of a series of put Warrants:

$$\frac{(\text{Strike Level} - \text{Closing Level}) \text{ x one Board Lot x Index Currency Amount}}{\text{Divisor}}$$

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the CCASS Rules, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Divisor**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred in respect of the exercise of the Warrants;

"**First Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**General Conditions**" means the general terms and conditions set out in Appendix 1 of the Base Listing Document;

"**Index**" means the index specified in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Compiler**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Currency Amount**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Exchange**" means the Stock Exchange or any other exchange as specified in the relevant Launch Announcement and Supplemental Listing Document;

"**Interim Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(a) the occurrence or existence, on the Valuation Date during the one-half hour period that ends at the close of trading on the Index Exchange, of any of:

  (i) the suspension or material limitation of the trading of a material number of constituent securities that comprise the Index; or

  (ii) the suspension or material limitation of the trading of options or futures contracts relating to the Index on any exchanges on which such contracts are traded; or

  (iii) the imposition of any exchange controls in respect of any currencies involved in determining the Cash Settlement Amount.

  For the purposes of this paragraph (a), (X) the limitation of the number of hours or days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of any relevant exchange, and (Y) a limitation on trading imposed by reason of the movements in price exceeding the levels permitted by any relevant exchange will constitute a Market Disruption Event;

(b) where the Index Exchange is the Stock Exchange, the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued;

(c) a limitation or closure of the Index Exchange due to any unforeseen circumstances; or

(d) any circumstances beyond the control of the Issuer in which the Closing Level or, if applicable, the Exchange Rate, the First Exchange Rate or the Second Exchange Rate (as the case may be) cannot be determined by the Issuer in the manner set out in these Product Conditions or in such other manner as the Issuer considers appropriate at such time after taking into account all the relevant circumstances;

"**Product Conditions**" means these product terms and conditions;

"**Second Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the later of: (i) the Expiry Date; and (ii) the day on which the Closing Level is determined in accordance with the Conditions;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment of the Cash Settlement Amount electronically through CCASS to the Designated Bank Account;

"**Strike Level**" means the level specified as such in the relevant Launch Announcement and Supplemental Listing Document; and

"**Valuation Date**" means the date specified in the Launch Announcement and Supplemental Listing Document, provided that if the Issuer determines, in its sole discretion, that a Market Disruption Event has occurred on the Valuation Date, then the Issuer shall determine the Closing Level on the basis of its good faith estimate of the Closing Level that would have prevailed on that day but for the occurrence of the Market Disruption Event, provided that the Issuer, if applicable, may, but shall not be obliged to, determine such Closing Level by having regard to the manner in which futures contracts relating to the Index are calculated.

Other capitalised terms shall, unless otherwise defined herein, have the meaning ascribed to them in the Base Listing Document, the General Conditions, the relevant Launch Announcement and Supplemental Listing Document or the Global Certificate.

2. Warrant Rights and Exercise Expenses

2.1 ***Warrant Rights***

Every Board Lot gives each Holder, upon due exercise and compliance with Product Condition 3, the right to receive payment of the Cash Settlement Amount, if any.

2.2 ***Exercise Expenses***

On exercise of the Warrants, Holders will be obliged to give an irrevocable authorisation to the Issuer to deduct all Exercise Expenses in accordance with Product Condition 3.

3. Exercise of Warrants

(a) Exercise of Warrants in Board Lots

Warrants may only be exercised in Board Lots or integral multiples thereof.

(b) Automatic Exercise

The Warrants are exercisable only on the Expiry Date. Any Warrant will automatically be exercised if the Cash Settlement Amount on the Expiry Date is greater than zero (without notice being given to the Holders). The Holders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Holders the Cash Settlement Amount (net of any Exercise Expenses)(if any) in accordance with Product Condition 3(d).

Any Warrant which has not been automatically exercised in accordance with this Product Condition 3(b) shall expire immediately without value thereafter and all rights of the Holder and obligations of the Issuer with respect to such Warrant shall cease.

(c) Cancellation

The Issuer will, with effect from the first Business Day following the Expiry Date, remove from the Register the name of the person in respect of the Warrants which:

(i) are the subject of an exercise pursuant to automatic exercise in accordance with these Product Conditions; or

(ii) have expired worthless,

and thereby cancel the relevant Warrants.

(d) *Cash Settlement*

Subject to automatic exercise of Warrants in accordance with these Product Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Holder equal to the Cash Settlement Amount (net of any Exercise Expenses). If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable by the Issuer.

The Cash Settlement Amount (net of any Exercise Expenses) will be despatched no later than the Settlement Date by crediting that amount, in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

4. Adjustments to the Index

4.1 ***Successor Index Compiler Calculates and Reports Index***

If the Index is:

(a) not calculated and announced by the Index Compiler but is calculated and published by a successor to the Index Compiler (the "**Successor Index Compiler**") acceptable to the Issuer; or

(b) replaced by a successor index using, in the determination of the Issuer, the same or a substantially similar formula for and method of calculation as used in the calculation of the Index,

then the Index will be deemed to be the index so calculated and announced by the Successor Index Compiler or that successor index, as the case may be.

4.2 ***Modification and Cessation of Calculation of Index***

If:

(a) on or prior to the Valuation Date the Index Compiler or (if applicable) the Successor Index Compiler makes a material change in the formula for or the method of calculating the Index or in any other way materially modifies the Index (other than a modification prescribed in that formula or method to maintain the Index in the event of changes in constituent securities, contracts, commodities or currencies and other routine events); or

(b) on the Valuation Date the Index Compiler or (if applicable) the Successor Index Compiler fails to calculate and publish the Index (other than as a result of a Market Disruption Event),

then the Issuer shall determine the Closing Level using, in lieu of a published level for the Index, the level for the Index as at the Valuation Date as determined by the Issuer in accordance with the formula for and method of calculating the Index last in effect prior to that change or failure, but using only those securities, contracts, commodities or currencies that comprised the Index immediately prior to that change or failure (other than those securities, contracts, commodities or currencies that have since ceased to be listed on the relevant exchange).

5. Illegality and Impracticability

The Issuer is entitled to terminate the Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Warrants, or for the Guarantor to perform its obligations under the Guarantee, in whole or in part as a result of:

   (i) the adoption of, or any change in, any relevant law or regulation (including any tax law); or

   (ii) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law),

   (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by the applicable law or regulation, pay to each Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Warrant held by such Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement as determined by the Issuer in its sole and absolute discretion. Payment will be made to each Holder in such manner as shall be notified to the Holder in accordance with General Condition 7.

Sponsor

BNP Paribas Securities (Asia) Limited
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Two International Finance Centre
8 Finance Street
Central, Hong Kong

PART D — PRODUCT CONDITIONS OF CASH SETTLED COMMODITY WARRANTS

The relevant Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Warrants may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the applicable Product Conditions, replace or modify the applicable Product Conditions for the purpose of such series of Warrants. Capitalised terms used in the applicable Product Conditions and not otherwise defined therein shall have the meaning given to them in the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means, for every Board Lot, an amount calculated by the Issuer as follows (and, if appropriate, converted into the Settlement Currency at the Exchange Rate):

(a) in the case of a series of call Warrants:

$$\frac{\text{Entitlement x (Closing Price – Strike Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

(b) in the case of a series of put Warrants:

$$\frac{\text{Entitlement x (Strike Price – Closing Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the CCASS Rules, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Price**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Commodity**" means the commodity specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Commodity Business Day**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred in respect of the exercise of the Warrants;

"**General Conditions**" means the general terms and conditions set out in Appendix 1 of the Base Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(a) the occurrence or existence, on a Valuation Day of any suspension of or material limitation imposed on, trading in the Commodity or any warrants, options contracts or futures contracts relating to the Commodity on any Related Exchange;

(b) a limitation or closure of any Related Exchange or the Stock Exchange due to any unforeseen circumstances;

(c) the disappearance of, or disappearance of trading in, the Commodity;

(d) a Price Source Disruption Event; or

(e) any circumstances beyond the control of the Issuer in which the Closing Price or the Exchange Rate cannot be determined by the Issuer in the manner set out in these Product Conditions or in such other manner as the Issuer considers appropriate at such time after taking into account all the relevant circumstances;

"**Price Source**" means the publication (or such other origin of price source reference) (if any) specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Price Source Disruption Event**" means:

(a) the failure of the Price Source to announce or publish any relevant level, value or price in relation to the Commodity (or the information necessary for determining the Closing Price); or

(b) the temporary or permanent discontinuance or unavailability of the Price Source;

"**Product Conditions**" means these product terms and conditions;

"**Relevant Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Related Exchange**" means any exchange or quotation system in a major international market (including but not limited to New York, Chicago, London, Australia and Frankfurt) on which options contracts or futures contracts or other derivatives contracts relating to the Commodity is traded, as determined by the Issuer;

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the Valuation Date;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment of the Cash Settlement Amount electronically through CCASS to the Designated Bank Account;

"**Strike Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Unit**" means the unit specified as such in the relevant Launch Announcement and Supplemental Listing Document; and

"**Valuation Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document, provided that if the Issuer determines, in its sole discretion, that on the Valuation Date a Market Disruption Event has occurred, then the Issuer will determine the Closing Price on the basis of its good faith estimate of the Closing Price that would have prevailed on that day but for the occurrence of the Market Disruption Event.

Other capitalised terms shall, unless otherwise defined herein, have the meaning ascribed to them in the Base Listing Document, the General Conditions, the relevant Launch Announcement and Supplemental Listing Document or the Global Certificate.

2. Warrant Rights and Exercise Expenses

2.1 *Warrant Rights*

Every Board Lot gives each Holder, upon due exercise and compliance with Product Condition 3, the right to receive payment of the Cash Settlement Amount, if any.

2.2 *Exercise Expenses*

On exercise of the Warrants, Holders will be obliged to give an irrevocable authorisation to the Issuer to deduct all Exercise Expenses in accordance with Product Condition 3.

3. Exercise of Warrants

(a) Exercise of Warrants in Board Lots

Warrants may only be exercised in Board Lots or integral multiples thereof.

(b) Automatic Exercise

The Warrants are exercisable only on the Expiry Date. Any Warrant will automatically be exercised if the Cash Settlement Amount on the Expiry Date is greater than zero (without notice being given to the Holders). The Holders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Holders the Cash Settlement Amount (net of any Exercise Expenses)(if any) in accordance with Product Condition 3(d).

Any Warrant which has not been automatically exercised in accordance with this Product Condition 3(b) shall expire immediately without value thereafter and all rights of the Holder and obligations of the Issuer with respect to such Warrant shall cease.

(c) Cancellation

The Issuer will, with effect from the first Business Day following the Expiry Date, remove from the Register the name of the person in respect of the Warrants which:

(i) are the subject of an exercise pursuant to automatic exercise in accordance with these Product Conditions; or

(ii) have expired worthless,

and thereby cancel the relevant Warrants.

(d) Cash Settlement

Subject to automatic exercise of Warrants in accordance with these Product Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Holder equal to the Cash Settlement Amount (net of any Exercise Expenses). If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable by the Issuer.

The Cash Settlement Amount (net of any Exercise Expenses) will be despatched no later than the Settlement Date by crediting that amount, in accordance with the CCASS Rules, to the Designated Bank Account. If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

4. Adjustments

4.1 *Market Disruption Events*

Without limiting Product Condition 3(d), if a Market Disruption Event occurs, the Issuer has the right to adjust the Price Source, the Closing Price, the Exchange Rate and/or any other relevant variables accordingly. The Issuer shall as soon as reasonably practicable under such circumstances notify the Holders in accordance with General Condition 7 if it determines that a Market Disruption Event has occurred.

4.2 *Foreign Currency Controls*

If exchange control or other laws, regulations, directives or guidelines are imposed by any central banking authority or other governmental or regulatory body which:

(a) requires the Issuer to obtain permission from such authority or body to purchase the Settlement Currency;

(b) otherwise restricts the Issuer's ability to obtain the Settlement Currency; or

(c) otherwise adversely regulates the purchase or holding of the Settlement Currency such that additional costs are imposed in obtaining the Settlement Currency which would not be imposed in the absence of such laws, regulations, directives or guidelines, or if the cost of obtaining the Settlement Currency at the Exchange Rate is determined by the Issuer to be excessive because of a disruption in the foreign exchange market relating to the Settlement Currency,

then, upon notice from the Issuer to Holders in accordance with General Condition 7 to such effect, Holders who have exercised their Warrants in accordance with Product Condition 3 shall receive, at the option of the Issuer, in lieu of the Settlement Currency, an amount equal to the Cash Settlement Amount in any other currency as determined by the Issuer.

5. Illegality or Impracticability

The Issuer is entitled to terminate the Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Warrants, or for the Guarantor to perform its obligations under the Guarantee, in whole or in part as a result of:

  (i) the adoption of, or any change in, any relevant law or regulation (including any tax law); or

  (ii) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law),

  (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by the applicable law or regulation, pay to each Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Warrant held by such Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement as determined by the Issuer in its sole and absolute discretion. Payment will be made to each Holder in such manner as shall be notified to the Holder in accordance with General Condition 7.

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PART E — PRODUCT CONDITIONS OF CASH SETTLED COMMODITY FUTURES WARRANTS

The relevant Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Warrants may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the applicable Product Conditions, replace or modify the applicable Product Conditions for the purpose of such series of Warrants. Capitalised terms used in the applicable Product Conditions and not otherwise defined therein shall have the meaning given to them in the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means, for every Board Lot, an amount calculated by the Issuer as follows (and, if appropriate, converted into the Settlement Currency at the Exchange Rate):

(a) in the case of a series of call Warrants:

$$\frac{\text{Entitlement x (Closing Price – Strike Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

(b) in the case of a series of put Warrants:

$$\frac{\text{Entitlement x (Strike Price – Closing Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the CCASS Rules, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Price**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Commodity**" means the commodity specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Commodity Futures**" means the commodity futures specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Commodity Futures Trading Day**" means a day on which the Relevant Exchange is scheduled to open for trading;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred in respect of the exercise of the Warrants;

"**General Conditions**" means the general terms and conditions set out in Appendix 1 of the Base Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(a) the occurrence or existence, on the Valuation Date of:

  (i) any suspension of or limitation imposed on trading:

    (A) on the Relevant Exchange in the Commodity Futures or securities generally; or

    (B) on any Related Exchange in any options contracts or futures contracts relating to the Commodity or the Commodity Futures, if, in any such case, such suspension or limitation is, in the determination of the Issuer, material; or

  (ii) of any event that disrupts or impairs (as determined by the Issuer) the ability of market participants in general to effect transactions in, or obtain market values for, the Commodity Futures, options contracts or futures contracts on or relating to the Commodity or Commodity Futures on any Related Exchange; or

(b) the failure of the Relevant Exchange to announce or publish any relevant level, value or price in relation to the Commodity Futures (or the information necessary for determining the Closing Price); or

(c) a limitation or closure of the Relevant Exchange, any Related Exchange or the Stock Exchange due to any other unforeseen circumstances; or

(d) the permanent discontinuation of trading in the Commodity Futures on the Relevant Exchange or the disappearance of, or disappearance of trading in, the Commodity Futures or the Commodity; or

(e) any circumstances beyond the control of the Issuer in which the Closing Price or the Exchange Rate cannot be determined by the Issuer in the manner set out in these Product Conditions or in such other manner as the Issuer considers appropriate at such time after taking into account all the relevant circumstances; or

(f) the occurrence of a material change in the content, composition or constitution of the Commodity Futures or the Commodity; or

(g) the occurrence of a material change in the formula for or the method of calculating the relevant level, value or price in relation to the Commodity Futures.

"**Product Conditions**" means these product terms and conditions;

"**Relevant Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Related Exchange**" means any exchange or quotation system in a major international market on which options contracts or futures contracts or other derivatives contracts relating to the Commodity Futures is traded, as determined by the Issuer;

"**Relevant Exchange**" means the exchange specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the Valuation Date;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment of the Cash Settlement Amount electronically through CCASS to the Designated Bank Account;

"**Strike Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Unit**" means the unit specified as such in the relevant Launch Announcement and Supplemental Listing Document; and

"**Valuation Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document, provided that if the Issuer determines, in its sole discretion, that on the Valuation Date a Market Disruption Event has occurred, then the Issuer will determine the Closing Price on the basis of its good faith estimate of the Closing Price that would have prevailed on that day but for the occurrence of the Market Disruption Event.

Other capitalised terms shall, unless otherwise defined herein, have the meaning ascribed to them in the Base Listing Document, the General Conditions, the relevant Launch Announcement and Supplemental Listing Document or the Global Certificate.

2. Warrant Rights and Exercise Expenses

2.1 ***Warrant Rights***

Every Board Lot gives each Holder, upon due exercise and compliance with Product Condition 3, the right to receive payment of the Cash Settlement Amount, if any.

2.2 ***Exercise Expenses***

On exercise of the Warrants, Holders will be obliged to give an irrevocable authorisation to the Issuer to deduct all Exercise Expenses in accordance with Product Condition 3.

3. Exercise of Warrants

(a) Exercise of Warrants in Board Lots

Warrants may only be exercised in Board Lots or integral multiples thereof.

(b) Automatic Exercise

The Warrants are exercisable only on the Expiry Date. Any Warrant will automatically be exercised if the Cash Settlement Amount on the Expiry Date is greater than zero (without notice being given to the Holders). The Holders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Holders the Cash Settlement Amount (net of any Exercise Expenses)(if any) in accordance with Product Condition 3(d).

Any Warrant which has not been automatically exercised in accordance with this Product Condition 3(b) shall expire immediately without value thereafter and all rights of the Holder and obligations of the Issuer with respect to such Warrant shall cease.

(c) Cancellation

The Issuer will, with effect from the first Business Day following the Expiry Date, remove from the Register the name of the person in respect of the Warrants which:

(i) are the subject of an exercise pursuant to automatic exercise in accordance with these Product Conditions; or

(ii) have expired worthless,

and thereby cancel the relevant Warrants.

(d) *Cash Settlement*

Subject to automatic exercise of Warrants in accordance with these Product Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Holder equal to the Cash Settlement Amount (net of any Exercise Expenses). If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable by the Issuer.

The Cash Settlement Amount (net of any Exercise Expenses) will be despatched no later than the Settlement Date by crediting that amount, in accordance with the CCASS Rules, to the Designated Bank Account. If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

4. Adjustments

4.1 ***Market Disruption Events***

Without limiting Product Condition 3(d), if a Market Disruption Event occurs, the Issuer has the right to adjust the Closing Price, the Exchange Rate and/or any other relevant variables accordingly. The Issuer shall as soon as reasonably practicable under such circumstances notify the Holders in accordance with General Condition 7 if it determines that a Market Disruption Event has occurred.

4.2 ***Foreign Currency Controls***

If exchange control or other laws, regulations, directives or guidelines are imposed by any central banking authority or other governmental or regulatory body which:

(a) requires the Issuer to obtain permission from such authority or body to purchase the Settlement Currency;

(b) otherwise restricts the Issuer's ability to obtain the Settlement Currency; or

(c) otherwise adversely regulates the purchase or holding of the Settlement Currency such that additional costs are imposed in obtaining the Settlement Currency which would not be imposed in the absence of such laws, regulations, directives or guidelines, or if the cost of obtaining the Settlement Currency at the Exchange Rate is determined by the Issuer to be excessive because of a disruption in the foreign exchange market relating to the Settlement Currency,

then, upon notice from the Issuer to Holders in accordance with General Condition 7 to such effect, Holders who have exercised their Warrants in accordance with Product Condition 3 shall receive, at the option of the Issuer, in lieu of the Settlement Currency, an amount equal to the Cash Settlement Amount in any other currency as determined by the Issuer.

5. Illegality or Impracticability

The Issuer is entitled to terminate the Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Warrants, or for the Guarantor to perform its obligations under the Guarantee, in whole or in part as a result of:

   (i) the adoption of, or any change in, any relevant law or regulation (including any tax law); or

   (ii) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law), (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by the applicable law or regulation, pay to each Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Warrant held by such Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement as determined by the Issuer in its sole and absolute discretion. Payment will be made to each Holder in such manner as shall be notified to the Holder in accordance with General Condition 7.

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PART F — PRODUCT CONDITIONS OF CASH SETTLED CURRENCY WARRANTS

The relevant Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Warrants may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the applicable Product Conditions, replace or modify the applicable Product Conditions for the purpose of such series of Warrants. Capitalised terms used in the applicable Product Conditions and not otherwise defined therein shall have the meaning given to them in the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business and for carrying on foreign exchange transactions in Hong Kong;

"**Cash Settlement Amount**" means, for every Board Lot, an amount calculated by the Issuer as follows (and if applicable, converted into the Settlement Currency at the Settlement Exchange Rate):

(a) in the case of a series of call Warrants:

(Spot Rate − Strike Rate) x Currency Amount

(b) in the case of a series of put Warrants:

(Strike Rate − Spot Rate) x Currency Amount

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the CCASS Rules, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Currency Amount**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Currency Pair**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred in respect of the exercise of the Warrants;

"**General Conditions**" means the general terms and conditions set out in Appendix 1 of the Base Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(a) the occurrence, or existence, on the Valuation Date, of any circumstances beyond the control of the Issuer in which the Spot Rate or, if applicable, the Settlement Exchange Rate cannot be determined by the Issuer in the manner set out in these Product Conditions or in such other manner as the Issuer considers appropriate at such time after taking into account all the relevant circumstances; and/or

(b) the imposition of any exchange controls in respect of any currencies involved in determining the Cash Settlement Amount;

"**Product Conditions**" means these product terms and conditions;

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the Valuation Date;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment of the Cash Settlement Amount electronically through CCASS to the Designated Bank Account;

"**Spot Rate**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Settlement Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Strike Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document; and

"**Valuation Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document, provided that if the Issuer determines, in its sole discretion, that on the Valuation Date a Market Disruption Event has occurred, then the Issuer will determine the Spot Rate or, if applicable, the Settlement Exchange Rate or any other variables on the basis of its good faith estimate of the Spot Rate or, if applicable, the Settlement Exchange Rate or any other variables that would have prevailed on that day but for the occurrence of the Market Disruption Event.

Other capitalised terms shall, unless otherwise defined herein, have the meaning ascribed to them in the Base Listing Document, the General Conditions, the relevant Launch Announcement and Supplemental Listing Document or the Global Certificate.

2. Warrant Rights and Exercise Expenses

2.1 ***Warrant Rights***

Every Board Lot gives each Holder, upon due exercise and compliance with Product Condition 3, the right to receive payment of the Cash Settlement Amount, if any.

2.2 ***Exercise Expenses***

On exercise of the Warrants, Holders will be obliged to give an irrevocable authorisation to the Issuer to deduct all Exercise Expenses in accordance with Product Condition 3.

3. Exercise of Warrants

(a) Exercise of Warrants in Board Lots

Warrants may only be exercised in Board Lots or integral multiples thereof.

(b) Automatic Exercise

The Warrants are exercisable only on the Expiry Date. Any Warrant will automatically be exercised if the Cash Settlement Amount on the Expiry Date is greater than zero (without notice being given to the Holders). The Holders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Holders the Cash Settlement Amount (net of any Exercise Expenses)(if any) in accordance with Product Condition 3(d).

Any Warrant which has not been automatically exercised in accordance with this Product Condition 3(b) shall expire immediately without value thereafter and all rights of the Holder and obligations of the Issuer with respect to such Warrant shall cease.

(c) *Cancellation*

The Issuer will, with effect from the first Business Day following the Expiry Date, remove from the Register the name of the person in respect of the Warrants which:

(i) are the subject of an exercise pursuant to automatic exercise in accordance with these Product Conditions; or

(ii) have expired worthless,

and thereby cancel the relevant Warrants.

(d) *Cash Settlement*

Subject to automatic exercise of Warrants in accordance with these Product Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Holder equal to the Cash Settlement Amount (net of any Exercise Expenses). If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable by the Issuer.

The Cash Settlement Amount (net of any Exercise Expenses) will be despatched no later than the Settlement Date by crediting that amount, in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

4. Adjustments

4.1 ***Market Disruption Events***

Without limiting Product Condition 3(d), if a Market Disruption Event occurs, the Issuer has the right to adjust the Spot Rate or, if applicable, the Settlement Exchange Rate and/or any other relevant variables accordingly. The Issuer shall as soon as reasonably practicable under such circumstances notify the Holders in accordance with General Condition 7 if it determines that a Market Disruption Event has occurred.

4.2 ***Foreign Currency Controls***

If exchange control or other laws, regulations, directives or guidelines are imposed by any central banking authority or other governmental or regulatory body which:

(a) requires the Issuer to obtain permission from such authority or body to purchase the Settlement Currency;

(b) otherwise restricts the Issuer's ability to obtain the Settlement Currency; or

(c) otherwise adversely regulates the purchase or holding of the Settlement Currency such that additional costs are imposed in obtaining the Settlement Currency which would not be imposed in the absence of such laws, regulations, directives or guidelines, or if the cost of obtaining the Settlement Currency at the Settlement Exchange Rate is determined by the Issuer to be excessive because of a disruption in the foreign exchange market relating to the Settlement Currency,

then, upon notice from the Issuer to Holders in accordance with General Condition 7 to such effect, Holders who have exercised their Warrants in accordance with Product Condition 3 shall receive, at the option of the Issuer, in lieu of the Settlement Currency, an amount equal to the Cash Settlement Amount in any other currency as determined by the Issuer.

5. Illegality and Impracticability

The Issuer is entitled to terminate the Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Warrants, or for the Guarantor to perform its obligations under the Guarantee, in whole or in part as a result of:

(i) the adoption of, or any change in, any relevant law or regulation (including any tax law); or

(ii) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law),

(each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by the applicable law or regulation, pay to each Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Warrant held by such Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement as determined by the Issuer in its sole and absolute discretion. Payment will be made to each Holder in such manner as shall be notified to the Holder in accordance with General Condition 7.

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APPENDIX 3 — PRODUCT CONDITIONS OF CBBCS

The following pages set out the Product Conditions in respect of different types of CBBCs.

PART A — PRODUCT CONDITIONS OF CASH SETTLED CALLABLE BULL/BEAR CONTRACTS OVER SINGLE EQUITIES

These Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of CBBCs may specify other terms and conditions which shall, to the extent so specified or to the extent inconsistent with these Product Conditions, replace or modify these Product Conditions for the purpose of such series of CBBCs. Capitalised terms used in these Product Conditions and not otherwise defined herein shall have the meaning given to them in the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Call Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Cash Settlement Amount**" means:

(a) following a Mandatory Call Event:

(i) in the case of a series of Category R CBBCs, the Residual Value; or

(ii) in the case of a series of Category N CBBCs, zero; and

(b) at expiry:

(i) In the case of a series of bull CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Closing Price – Strike Price) x one Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

(ii) In the case of a series of bear CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Strike Price – Closing Price) x one Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

For the avoidance of doubt, if the Cash Settlement Amount is a negative figure, it shall be deemed to be zero;

"**Category N CBBCs**" means a series of CBBCs where the Call Price is equal to the Strike Price;

"**Category R CBBCs**" means a series of CBBCs where the Call Price is different from the Strike Price;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the CCASS Rules, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Price**" means the closing price of one Share, as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustment to such closing price as may be necessary to reflect any event as contemplated in Product Condition 4 such as capitalisation, rights issue, distribution or the like on the Valuation Date;

"**Company**" means the company specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Day of Notification"** means the Trading Day immediately following the day on which a Mandatory Call Event occurs;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred in respect of the early expiration of CBBCs upon the occurrence of a Mandatory Call Event or exercise of CBBCs upon expiry;

"**General Conditions**" means the general terms and conditions set out in Appendix 1 of the Base Listing Document;

"**Last Trading Day**" means the trading day on the Stock Exchange immediately preceding the Expiry Date;

"**Mandatory Call Event**" means that the Spot Price of the Shares on any Trading Day during the Observation Period is:

(a) in the case of a series of bull CBBCs, at or below the Call Price; or

(b) in the case of a series of bear CBBCs, at or above the Call Price;

"**Market Disruption Event**" means:

(a) the occurrence or existence on any Trading Day during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in (i) the Shares; or (ii) any options or futures contracts relating to the Shares if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(b) the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued; or

(c) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Maximum Trade Price**" means the highest Spot Price of the Shares (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Product Condition 4 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

"**MCE Valuation Date**" means the last Trading Day during the MCE Valuation Period;

"**MCE Valuation Period**" means the period commencing from and including the moment upon which the Mandatory Call Event occurs (the trading session during which the Mandatory Call Event occurs is the "**1st Session**") and up to the end of the trading session on the Stock Exchange immediately following the 1st Session ("**2nd Session**") unless, in the determination of the Issuer in its good faith, the 2nd Session for any reason (including, without limitation, a Market Disruption Event occurring and subsisting in the 2nd Session) does not contain any continuous period of 1 hour or more than 1 hour during which trading in the Shares is permitted on the Stock Exchange with no limitation imposed, the MCE Valuation Period shall be extended to the end of the subsequent trading session following the 2nd Session during which trading in the Shares is permitted on the Stock Exchange with no limitation imposed for a continuous period of at least 1 hour notwithstanding the existence or continuance of a Market Disruption Event in such postponed trading session, unless the Issuer determines in its good faith that each trading session on each of the four Trading Days immediately following the date on which the Mandatory Call Event occurs does not contain any continuous period of 1 hour or more than 1 hour during which trading in the Shares is permitted on the Stock Exchange with no limitation imposed. In that case:

(a) the period commencing from the 1st Session up to, and including, the last trading session on the Stock Exchange of the fourth Trading Day immediately following the date on which the Mandatory Call Event occurs shall be deemed to be the MCE Valuation Period; and

(b) the Issuer shall determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) having regard to the then prevailing market conditions, the last reported Spot Price and such other factors as the Issuer may determine to be relevant in its good faith.

For the avoidance of doubt, all Spot Prices available throughout the extended MCE Valuation Period shall be taken into account to determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) for the calculation of the Residual Value.

For the purposes of this definition,

(A) the pre-opening session, the morning session and, in the case of half day trading, the closing auction session (if any) of the same day; and

(B) the afternoon session and the closing auction session (if any) of the same day,

shall each be considered as one trading session only;

"**Minimum Trade Price**" means the lowest Spot Price of the Shares (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Product Condition 4 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

"**Number of CBBC(s) per Entitlement**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Observation Commencement Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Observation Period**" means the period commencing from and including the Observation Commencement Date up to and including the close of trading on the Stock Exchange on the Last Trading Day. For the avoidance of doubt, the Observation Period shall not be extended notwithstanding the Valuation Date shall not fall on the Last Trading Day;

"**Post MCE Trades**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Product Conditions**" means these product terms and conditions;

"**Residual Value**" means:

(a) In the case of a series of bull CBBCs:

$$\text{Residual Value per Board Lot} = \frac{\text{Entitlement x (Minimum Trade Price – Strike Price) x one Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

(b) In the case of a series of bear CBBCs:

$$\text{Residual Value per Board Lot} = \frac{\text{Entitlement x (Strike Price – Maximum Trade Price) x one Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after (i) the end of the MCE Valuation Period or (ii) the later of: (a) the Expiry Date; and (b) the day on which the Closing Price is determined in accordance with the Conditions (as the case may be);

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment of the Cash Settlement Amount (if any) electronically through CCASS to the Designated Bank Account;

"**Share**" means the share of the Company specified as such in the relevant Launch Announcement and Supplemental Listing Document and "**Shares**" shall be construed accordingly;

"**Spot Price**" means:

(a) in respect of a continuous trading session of the Stock Exchange, the price per Share concluded by means of automatic order matching on the Stock Exchange as reported in the official real-time dissemination mechanism for the Stock Exchange during such continuous trading session in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules); and

(b) in respect of a pre-opening session or a closing auction session (if applicable) of the Stock Exchange, as the case may be, the final Indicative Equilibrium Price (as defined in the Trading Rules) of the Share (if any) calculated at the end of the pre-order matching period of such pre-opening session or closing auction session (if applicable), as the case may be, in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules),

subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Strike Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Trading Day**" means any day on which the Stock Exchange is scheduled to be open for trading for its regular trading sessions;

"**Trading Rules**" means the Rules and Regulations of the Exchange prescribed by the Stock Exchange from time to time; and

"**Valuation Date**" means the Trading Day immediately preceding the Expiry Date unless, in the determination of the Issuer, a Market Disruption Event has occurred on that day in which case, the Valuation Date shall be the first succeeding Trading Day on which the Issuer determines that there is no Market Disruption Event, unless the Issuer determines that there is a Market Disruption Event occurring on each of the four Trading Days immediately following the original date which (but for the Market Disruption Event) would have been the Valuation Date. In that case:

(a) the fourth Trading Day immediately following the original date shall be deemed to be the Valuation Date (regardless of the Market Disruption Event); and

(b) the Issuer shall determine the Closing Price of the Shares having regard to the then prevailing market conditions, the last reported trading price of the Shares on the Stock Exchange and such other factors as the Issuer determines to be relevant.

Other capitalised terms shall, unless otherwise defined herein, have the meaning ascribed to them in the Base Listing Document, the General Conditions, the relevant Launch Announcement and Supplemental Listing Document or the Global Certificate.

2. Illegality or Impracticability

The Issuer is entitled to terminate the CBBCs if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the CBBCs, or for the Guarantor to perform its obligations under the Guarantee, in whole or in part as a result of:

(i) the adoption of, or any change in, any relevant law or regulation (including any tax law); or

(ii) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law),

(each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the CBBCs due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by the applicable law or regulation, pay to each Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each CBBC held by such Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement as determined by the Issuer in its sole and absolute discretion. Payment will be made to each Holder in such manner as shall be notified to the Holder in accordance with General Condition 7.

3. Exercise of CBBCs

3.1 *Exercise of CBBCs in Board Lots*

CBBCs may only be exercised in Board Lots or integral multiples thereof.

3.2 *Automatic Exercise*

If no Mandatory Call Event has occurred during the Observation Period, the CBBCs will be deemed to be automatically exercised on the Expiry Date.

3.3 *Mandatory Call Event*

(a) Subject to Product Condition 3.3(b), following a Mandatory Call Event, the CBBCs will be terminated automatically and the Issuer will give a notice of the Mandatory Call Event and early expiry of the CBBCs (the "**Announcement on MCE and Early Expiration**") to the Holders in accordance with General Condition 7. Trading in the CBBCs will be suspended immediately upon a Mandatory Call Event and all Post MCE Trades will be cancelled and will not be recognised by the Stock Exchange or the Issuer.

In the case of Category R CBBCs, the Issuer will give a notice of the valuation of the Residual Value (the "**Announcement on Valuation of Residual Value**") to the Holders before the end of the trading session immediately after the MCE Valuation Period in accordance with General Condition 7.

(b) A Mandatory Call Event is irrevocable unless it is triggered as a result of any of the following events:

(i) system malfunction or other technical errors of Hong Kong Exchanges and Clearing Limited; or

(ii) manifest errors caused by the relevant third party price source where applicable;

and

(A) in the case of a system malfunction or other technical errors prescribed in paragraph (i) above, such event is reported by the Stock Exchange to the Issuer, and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked, and

(B) in the case of an error by the relevant price source prescribed in paragraph (ii) above, such event is reported by the Issuer to the Stock Exchange, and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked,

in each case, such mutual agreement must be reached no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Day of Notification or such other time frame as prescribed by the Stock Exchange from time to time, in which case, (A) the Mandatory Call Event so triggered will be reversed; and (B) all cancelled trades (if any) will be reinstated and trading of the CBBCs will resume no later than the Trading Day immediately following the Day of Notification in accordance with the rules and/or requirements prescribed by the Stock Exchange from time to time.

3.4 ***Entitlement***

Every Board Lot of CBBCs entitles the Holder to receive from the Issuer on the Settlement Date the Cash Settlement Amount (if any).

3.5 ***Cancellation***

Upon early expiration of the CBBCs at the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date, the Issuer will, with effect from the first Business Day following the MCE Valuation Date or the Expiry Date (as the case may be) remove the name of the Holder from the Register in respect of the number of CBBCs which have expired or exercised (as the case may be) and thereby cancel the relevant CBBCs and if applicable, the Global Certificate.

3.6 ***Exercise Expenses***

(a) Any Exercise Expenses which were not determined by the Issuer:

(i) during the MCE Valuation Period following the Mandatory Call Event; or

(ii) otherwise, on the Expiry Date (as the case may be), and were not deducted from the Cash Settlement Amount prior to delivery to the Holder in accordance with Product Condition 3.7, shall be notified to the Holder as soon as practicable after determination thereof by the Issuer and shall be paid by the Holder to the Issuer immediately upon demand.

(b) Holders shall note that they shall be responsible for additional costs and expenses in connection with any early expiration or exercise of the CBBCs including the Exercise Expenses which amount shall, to the extent necessary, be payable to the Issuer and collected from the Holders.

3.7 ***Cash Settlement***

Upon early expiration of the CBBCs following the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date (as the case may be), the Issuer will, in respect of every Board Lot, pay the Cash Settlement Amount (net of any Exercise Expenses) (if any) to the relevant Holder. If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable by the Issuer.

The Cash Settlement Amount (net of any Exercise Expenses) (if any) will be despatched no later than the Settlement Date by crediting that amount, in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

3.8 ***Responsibility of Issuer, Guarantor and Sponsor***

None of the Issuer, the Guarantor, the Sponsor or their respective agents shall have any responsibility for any errors or omissions in the calculation and dissemination of any variables published by a third party and used in any calculation made pursuant to these Product Conditions or in the calculation of the Cash Settlement Amount arising from such errors or omissions.

The purchase of CBBCs does not confer on any Holder of such CBBCs any rights (whether in respect of voting, distributions or otherwise) in relation to the Shares.

3.9 ***Liability of Issuer, Guarantor and Sponsor***

Exercise and settlement of the CBBCs is subject to all applicable laws, rules, regulations and guidelines in force at the relevant time and neither the Issuer, the Guarantor, nor the Sponsor shall incur any liability whatsoever if it is unable to effect the transactions contemplated, after using all reasonable efforts, as a result of any such laws, rules, regulations or guidelines. Neither the Issuer, the Guarantor, nor the Sponsor shall under any circumstances be liable for any acts or defaults of the CCASS in relation to the performance of its duties in relation to the CBBCs.

3.10 ***Trading***

Subject to Product Condition 3.3(b), trading in CBBCs on the Stock Exchange shall cease:

(a) immediately upon the occurrence of a Mandatory Call Event; or

(b) at the close of trading for the Trading Day immediately preceding the Expiry Date, whichever is the earlier.

4. Adjustments

4.1 ***Rights Issues***

If and whenever the Company shall, by way of Rights (as defined below), offer new Shares for subscription at a fixed subscription price to the holders of existing Shares pro rata to existing holdings (a "**Rights Offer**"), the Entitlement will be adjusted to take effect on the Business Day ("**Rights Issue Adjustment Date**") on which trading in the Shares becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E: Existing Entitlement immediately prior to the Rights Offer

S: Cum-Rights Share price determined by the closing price on the Stock Exchange on the last Business Day on which Shares are traded on a cum-Rights basis

R: Subscription price per Share as specified in the Rights Offer plus an amount equal to any dividends or other benefits foregone to exercise the Rights

M: Number of new Share(s) (whether a whole or a fraction) per existing Share each holder thereof is entitled to subscribe

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Rights Issue Adjustment Date.

For the purposes of these Product Conditions:

"**Rights**" means the right(s) attached to each existing Share or needed to acquire one new Share (as the case may be) which are given to the holders of existing Shares to subscribe at a fixed subscription price for new Shares pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

4.2 ***Bonus Issues***

If and whenever the Company shall make an issue of Shares credited as fully paid to the holders of Shares generally by way of capitalisation of profits or reserves (other than pursuant to a scrip dividend or similar scheme for the time being operated by the Company or otherwise in lieu of a cash dividend and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement will be increased on the Business Day ("**Bonus Issue Adjustment Date**") on which trading in the Shares becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = 1 + N$$

E: Existing Entitlement immediately prior to the Bonus Issue

N: Number of additional Shares (whether a whole or a fraction) received by a holder of existing Shares for each Share held prior to the Bonus Issue

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Bonus Issue Adjustment Date.

4.3 ***Share Splits or Consolidations***

If and whenever the Company shall subdivide its Shares or any class of its outstanding share capital comprised of the Shares into a greater number of shares (a "**Subdivision**") or consolidate the Shares or any class of its outstanding share capital comprised of the Shares into a smaller number of shares (a "**Consolidation**"), then:

(i) in the case of a Subdivision, the Entitlement in effect immediately prior thereto will be increased whereas the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) will be decreased in the same ratio as the Subdivision; and

(ii) in the case of a Consolidation, the Entitlement in effect immediately prior thereto will be decreased whereas the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) will be increased in the same ratio as the Consolidation,

in each case on the day on which the Subdivision or Consolidation (as the case may be) shall have taken effect.

4.4 ***Merger or Consolidation***

If it is announced that the Company is to or may merge or consolidate with or into any other corporation (including becoming, by agreement or otherwise, a subsidiary of any corporation or controlled by any person or corporation) (except where the Company is the surviving corporation in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the CBBCs may in the absolute discretion of the Issuer be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion).

The rights attaching to the CBBCs after the adjustment shall, after such Restructuring Event, relate to the number of shares of the corporation(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Shares, as the case may be, to which the holder of such number of Shares to which the CBBCs related immediately before such Restructuring Event would have been entitled upon such Restructuring Event. Thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer, be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected.

For the avoidance of doubt, any remaining Shares shall not be affected by this Product Condition 4.4 and, where cash is offered in substitution for Shares or is deemed to replace Substituted Securities as described above, references in these Product Conditions to the Shares shall include any such cash.

4.5 ***Cash Distribution***

No adjustment will be made for an ordinary cash dividend (whether or not it is offered with a scrip alternative) ("**Ordinary Dividend**"). For any other forms of cash distribution ("**Cash Distribution**") announced by the Company, such as a cash bonus, special dividend or extraordinary dividend, no adjustment will be made unless the value of the Cash Distribution accounts for 2 per cent. or more of the Share's closing price on the day of announcement by the Company.

If and whenever the Company shall make a Cash Distribution credited as fully paid to the holders of Shares generally, the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Shares becomes ex-entitlement in respect of the relevant Cash Distribution ("**Cash Distribution Adjustment Date**") in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

E: Existing Entitlement immediately prior to the Cash Distribution

S: The closing price of the Share on the Stock Exchange on the Business Day immediately preceding the Cash Distribution Adjustment Date

CD: The Cash Distribution per Share

OD: The Ordinary Dividend per Share, provided that the date on which the Shares are traded on an ex-Ordinary Dividend basis is the Cash Distribution Adjustment Date. For the avoidance of doubt, the OD shall be zero if the date on which the Shares are traded on an ex-Ordinary Dividend basis is not the Cash Distribution Adjustment Date

In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Cash Distribution Adjustment Date.

5. Liquidation

In the event of a liquidation or dissolution of the Company or the appointment of a liquidator, receiver or administrator or analogous person under Hong Kong law in respect of the whole or substantially the whole of its undertaking, property or assets, all unexercised CBBCs will lapse and shall cease to be valid for any purpose, in the case of voluntary liquidation, on the effective date of the relevant resolution and, in the case of an involuntary liquidation or dissolution, on the date of the relevant court order or, in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of its undertaking, property or assets, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of law.

6. Delisting

6.1 *Adjustments following delisting*

If at any time the Shares cease to be listed on the Stock Exchange, the Issuer shall give effect to these Product Conditions in such manner and make such adjustments to the rights attaching to the CBBCs as it shall, in its absolute discretion, consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Holders generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of any Holder or the tax or other consequences that may result in any particular jurisdiction).

6.2 *Listing on another exchange*

Without prejudice to the generality of Product Condition 6.1, where the Shares are, or, upon the delisting, become, listed on any other stock exchange, these Product Conditions may, in the absolute discretion of the Issuer, be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Holders, make such adjustments to the entitlements of Holders on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

Sponsor

BNP Paribas Securities (Asia) Limited
59th-63rd Floors
Two International Finance Centre
8 Finance Street
Central, Hong Kong

PART B — PRODUCT CONDITIONS OF CASH SETTLED CALLABLE BULL/BEAR CONTRACTS OVER AN INDEX

These Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document, subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of CBBCs may specify other terms and conditions which shall, to the extent so specified or to the extent inconsistent with these Product Conditions, replace or modify these Product Conditions for the purpose of such series of CBBCs. Capitalised terms used in these Product Conditions and not otherwise defined herein shall have the meaning given to them in the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Call Level**" means the level specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Cash Settlement Amount**" means, in respect of every Board Lot, an amount calculated by the Issuer in accordance with the following formula (and, if appropriate, either (X) converted (if applicable) into the Settlement Currency at the Exchange Rate or, as the case may be, (Y) converted into the Interim Currency at the First Exchange Rate and then (if applicable) converted into Settlement Currency at the Second Exchange Rate):

(a) following a Mandatory Call Event:

 (i) in the case of a series of Category R CBBCs, the Residual Value; or

 (ii) in the case of a series of Category N CBBCs, zero; and

(b) at expiry:

 (i) in the case of a series of bull CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{(\text{Closing Level} - \text{Strike Level}) \text{ x one Board Lot x Index Currency Amount}}{\text{Divisor}}$$

 (ii) in the case of a series of bear CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{(\text{Strike Level} - \text{Closing Level}) \text{ x one Board Lot x Index Currency Amount}}{\text{Divisor}}$$

For the avoidance of doubt, if the Cash Settlement Amount is a negative figure, it shall be deemed to be zero;

"**Category N CBBCs**" means a series of CBBCs where the Call Level is equal to the Strike Level;

"**Category R CBBCs**" means a series of CBBCs where the Call Level is different from the Strike Level;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the CCASS Rules, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Day of Notification**" means the Trading Day immediately following the day on which a Mandatory Call Event occurs;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Divisor**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred in respect of the early expiration of CBBCs upon the occurrence of a Mandatory Call Event or exercise of CBBCs upon expiry;

"**First Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**General Conditions**" means the general terms and conditions set out in Appendix 1 of the Base Listing Document;

"**Index**" means the index specified in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Business Day**" means any day on which the Index Exchange is scheduled to open for trading for its regular trading sessions;

"**Index Compiler**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Currency Amount**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Exchange**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Interim Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Last Trading Day**" means the trading day on the Stock Exchange immediately preceding the Expiry Date;

"**Mandatory Call Event**" means that the Spot Level of the Index on any Index Business Day during the Observation Period is:

(a) in the case of a series of bull CBBCs, at or below the Call Level; or

(b) in the case of a series of bear CBBCs, at or above the Call Level;

"**Market Disruption Event**" means:

(a) the occurrence or existence on any Index Business Day during the one-half hour period that ends at the close of trading on the Index Exchange, of any of:

    (i) the suspension or material limitation of the trading of a material number of constituent securities that comprise the Index; or

    (ii) the suspension or material limitation of the trading of options or futures contracts relating to the Index on any exchanges on which such contracts are traded; or

    (iii) the imposition of any exchange controls in respect of any currencies involved in determining the Cash Settlement Amount.

For the purposes of this paragraph (a), (X) the limitation of the number of hours or days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of any relevant exchange, and (Y) a limitation on trading imposed by reason of the movements in price exceeding the levels permitted by any relevant exchange will constitute a Market Disruption Event;

(b) where the Index Exchange is the Stock Exchange, the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued;

(c) a limitation or closure of the Index Exchange due to any unforeseen circumstances; or

(d) any circumstances beyond the control of the Issuer in which the Closing Level or, if applicable, the Exchange Rate, the First Exchange Rate or the Second Exchange Rate (as the case may be) cannot be determined by the Issuer in the manner set out in these Product Conditions or in such other manner as the Issuer considers appropriate at such time after taking into account all the relevant circumstances;

"**Maximum Index Level**" means the highest Spot Level of the Index during the MCE Valuation Period;

"**MCE Valuation Date**" means the last Trading Day during the MCE Valuation Period;

"**MCE Valuation Period**" means:

(a) in respect of an Index Exchange located in Hong Kong, the period commencing from and including the moment upon which the Mandatory Call Event occurs (the trading session during which the Mandatory Call Event occurs is the "**1st Session**") and up to the end of the trading session on the Index Exchange immediately following the 1st Session ("**2nd Session**") unless, in the determination of the Issuer in its good faith, the 2nd Session for any reason (including, without limitation, a Market Disruption Event occurring and subsisting in the 2nd Session) does not contain any continuous period of 1 hour or more than 1 hour during which Spot Level(s) is/are available, the MCE Valuation Period shall be extended to the end of the subsequent trading session on the Index Exchange following the 2nd Session during which Spot Level(s) is/are available for a continuous period of at least 1 hour notwithstanding the existence or continuance of a Market Disruption Event in such postponed trading session unless the Issuer determines in its good faith that each trading session on each of the four Index Business Days immediately following the date on which the Mandatory Call Event occurs does not contain any continuous period of 1 hour or more than 1 hour during which Spot Levels are available.

In that case:

(i) the period commencing from the 1st Session up to, and including, the last trading session of the fourth Index Business Day on the Index Exchange immediately following the date on which the Mandatory Call Event occurs shall be deemed to be the MCE Valuation Period; and

(ii) the Issuer shall determine the Maximum Index Level or the Minimum Index Level (as the case may be) having regard to the then prevailing market conditions, the last reported Spot Level of the Index and such other factors as the Issuer may determine to be relevant in its good faith.

For the avoidance of doubt, all Spot Levels available throughout the extended MCE Valuation Period shall be taken into account to determine the Maximum Index Level or the Minimum Index Level (as the case may be) for the calculation of the Residual Value.

For the purposes of this definition,

(A) the pre-opening session, the morning session and, in the case of half day trading, the closing auction session (if any) of the same day; and

(B) the afternoon session and the closing auction session (if any) of the same day,

shall each be considered as one trading session only; and

(b) in respect of an Index Exchange located outside Hong Kong, the period specified in the relevant Launch Announcement and Supplemental Listing Document;

"**Minimum Index Level**" means the lowest Spot Level of the Index during the MCE Valuation Period;

"**Observation Commencement Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Observation Period**" means the period commencing from and including the Observation Commencement Date up to and including the close of trading on the Last Trading Day. For the avoidance of doubt, the Observation Period shall not be extended notwithstanding that the Valuation Date shall not fall on the Last Trading Day;

"**Post MCE Trades**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Price Source**", if applicable, has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Product Conditions**" means these product terms and conditions;

"**Residual Value**" means, in respect of every Board Lot, an amount calculated by the Issuer in accordance with the following formula (and, if appropriate, either, converted (if applicable) into the Settlement Currency at the Exchange Rate, or converted into the Interim Currency at the First Exchange Rate and then (if applicable) converted into Settlement Currency at the Second Exchange Rate):

(a) In the case of a series of bull CBBCs:

$$\text{Residual Value per Board Lot} = \frac{(\text{Minimum Index Level} - \text{Strike Level}) \text{ x one Board Lot x Index Currency Amount}}{\text{Divisor}}$$

(b) In the case of a series of bear CBBCs:

$$\text{Residual Value per Board Lot} = \frac{(\text{Strike Level} - \text{Maximum Index Level}) \text{ x one Board Lot x Index Currency Amount}}{\text{Divisor}}$$

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after (i) the end of the MCE Valuation Period or (ii) the later of: (a) the Expiry Date; and (b) the day on which the Closing Level is determined in accordance with the Conditions (as the case may be);

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment of the Cash Settlement Amount (if any) electronically through CCASS to the Designated Bank Account;

"**Second Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Spot Level**" means, unless otherwise specified in the relevant Launch Announcement and Supplemental Listing Document, the spot level of the Index as compiled and published by the Index Compiler;

"**Strike Level**" means the level specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Successor Index**" means the successor index specified in the relevant Launch Announcement and Supplemental Listing Document;

"**Trading Day**" means any day on which the Stock Exchange is scheduled to be open for trading for its regular trading sessions;

"**Trading Rules**" means the Rules and Regulations of the Exchange prescribed by the Stock Exchange from time to time; and

"**Valuation Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document, provided that if the Issuer determines, in its sole discretion, that a Market Disruption Event has occurred on the Valuation Date, then the Issuer shall determine the Closing Level of the Index on the basis of its good faith estimate of the Closing Level that would have prevailed on that day but for the occurrence of the Market Disruption Event provided that the Issuer, if applicable, may, but will not be obliged to, determine such Closing Level by having regard to the manner in which futures contracts relating to the Index are calculated.

Other capitalised terms shall, unless otherwise defined herein, have the meaning ascribed to them in the Base Listing Document, the General Conditions, the relevant Launch Announcement and Supplemental Listing Document or the Global Certificate.

2. Illegality or Impracticability

The Issuer is entitled to terminate the CBBCs if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the CBBCs, or for the Guarantor to perform its obligations under the Guarantee, in whole or in part as a result of:

 (i) the adoption of, or any change in, any relevant law or regulation (including any tax law); or

 (ii) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law),

 (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the CBBCs due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by the applicable law or regulation, pay to each Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each CBBC held by such Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement as determined by the Issuer in its sole and absolute discretion. Payment will be made to each Holder in such manner as shall be notified to the Holder in accordance with General Condition 7.

3. Exercise of CBBCs

3.1 *Exercise of CBBCs in Board Lots*

CBBCs may only be exercised in Board Lots or integral multiples thereof.

3.2 *Automatic Exercise*

If no Mandatory Call Event has occurred during the Observation Period, the CBBCs will be deemed to be automatically exercised on the Expiry Date.

3.3 ***Mandatory Call Event***

(a) Subject to Product Condition 3.3(b) below, following a Mandatory Call Event, the CBBCs will be terminated automatically and the Issuer will give a notice of the Mandatory Call Event and early expiry of the CBBCs (the "**Announcement on MCE and Early Expiration**") to the Holders in accordance with General Condition 7. Trading in the CBBCs will be suspended immediately upon a Mandatory Call Event and all Post MCE Trades will be cancelled and will not be recognised by the Stock Exchange or the Issuer.

In the case of Category R CBBCs, the Issuer will give a notice of the valuation of the Residual Value (the "**Announcement on Valuation of Residual Value**") to the Holders before the end of the trading session of the Stock Exchange immediately after the corresponding trading session of the Stock Exchange during which the MCE Valuation Period ends in accordance with General Condition 7.

(b) A Mandatory Call Event is irrevocable unless it is triggered as a result of any of the following events:

(i) system malfunction or other technical errors of Hong Kong Exchanges and Clearing Limited; or

(ii) manifest errors caused by the relevant third party price source where applicable;

and

(A) in the case of a system malfunction or other technical errors prescribed in paragraph (i) above, such event is reported by the Stock Exchange to the Issuer and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked, and

(B) in the case of an error by the relevant price source prescribed in paragraph (ii) above, such event is reported by the Issuer to the Stock Exchange, and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked,

in each case,

(A) in respect of an Index Exchange located in Hong Kong, such mutual agreement must be reached no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Day of Notification or such other time frame as prescribed by the Stock Exchange from time to time; or

(B) in respect of an Index Exchange located outside Hong Kong:

(1) the revocation of the Mandatory Call Event is communicated to the other party by 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Day of Notification or such other time frame as prescribed by the Stock Exchange from time to time; and

(2) the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked on the Day of Notification.

In both cases:

(C) the Mandatory Call Event so triggered will be reversed; and

(D) all cancelled trades (if any) will be reinstated and trading of the CBBCs will resume no later than the Trading Day immediately following the Day of Notification in accordance with the rules and/or requirements prescribed by the Stock Exchange from time to time.

3.4 ***Entitlement***

Every Board Lot of CBBCs entitles the Holder to receive from the Issuer on the Settlement Date the Cash Settlement Amount (if any).

3.5 ***Cancellation***

Upon early expiration of the CBBCs at the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date, the Issuer will, with effect from the first Business Day following the MCE Valuation Date or the Expiry Date (as the case may be) remove the name of the Holder from the Register in respect of the number of CBBCs which have expired or exercised (as the case may be) and thereby cancel the relevant CBBCs and if applicable, the Global Certificate.

3.6 ***Exercise Expenses***

(a) Any Exercise Expenses which were not determined by the Issuer:

  (i) during the MCE Valuation Period following the Mandatory Call Event; or

  (ii) otherwise, on the Expiry Date (as the case may be), and were not deducted from the Cash Settlement Amount prior to delivery to the Holder in accordance with Product Condition 3.7, shall be notified to the Holder as soon as practicable after determination thereof by the Issuer and shall be paid by the Holder to the Issuer immediately upon demand.

(b) Holders shall note that they shall be responsible for additional costs and expenses in connection with any early expiration or exercise of the CBBCs including the Exercise Expenses which amount shall, to the extent necessary, be payable to the Issuer and collected from the Holders.

3.7 ***Cash Settlement***

Upon early termination of the CBBCs following the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date (as the case may be), the Issuer will, in respect of every Board Lot, pay the Cash Settlement Amount (net of any Exercise Expenses)(if any) to the relevant Holder. If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable by the Issuer.

The Cash Settlement Amount (net of any Exercise Expenses)(if any) will be despatched no later than the Settlement Date by crediting that amount, in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

3.8 ***Responsibility of Issuer, Guarantor and Sponsor***

None of the Issuer, the Guarantor, the Sponsor or their respective agents shall have any responsibility for any errors or omissions in the calculation and dissemination of any variables published by a third party and used in any calculation made pursuant to these Product Conditions or in the calculation of the Cash Settlement Amount arising from such errors or omissions.

The purchase of CBBCs does not confer on any Holder of such CBBCs any rights (whether in respect of voting, distributions or otherwise) in relation to the constituent securities, contracts, commodities or currencies comprising the Index.

3.9 ***Liability of Issuer, Guarantor and Sponsor***

Exercise and settlement of the CBBCs is subject to all applicable laws, rules, regulations and guidelines in force at the relevant time and neither the Issuer, the Guarantor nor the Sponsor shall incur any liability whatsoever if it is unable to effect the transactions contemplated, after using all reasonable efforts, as a result of any such laws, rules, regulations or guidelines. Neither the Issuer, the Guarantor nor the Sponsor shall under any circumstances be liable for any acts or defaults of the CCASS in relation to the performance of its duties in relation to the CBBCs.

3.10 ***Trading***

Subject to Product Condition 3.3(b), trading in CBBCs on the Stock Exchange shall cease:

(a) immediately upon the occurrence of a Mandatory Call Event; or

(b) at the close of trading for the Trading Day immediately preceding the Expiry Date, whichever is the earlier.

4. Adjustments to the Index

4.1 ***Successor Index Compiler Calculates and Reports Index***

If the Index is:

(a) not calculated and announced by the Index Compiler but is calculated and published by a successor to the Index Compiler (the "**Successor Index Compiler**") acceptable to the Issuer; or

(b) replaced by a successor index using, in the determination of the Issuer, the same or a substantially similar formula for and method of calculation as used in the calculation of the Index,

then the Index will be deemed to be the index so calculated and announced by the Successor Index Compiler or that successor index, as the case may be.

4.2 ***Modification and Cessation of Calculation of Index***

If:

(a) on any Index Business Day before the Expiry Date, the Index Compiler or (if applicable) the Successor Index Compiler makes a material change in the formula for or the method of calculating the Index or in any other way materially modifies the Index (other than a modification prescribed in that formula or method to maintain the Index in the event of changes in constituent securities, contracts, commodities or currencies and other routine events); or

(b) on any Index Business Day before the Expiry Date, the Index Compiler or (if applicable) the Successor Index Compiler fails to calculate and publish the Index (other than as a result of a Market Disruption Event),

then the Issuer shall determine the Closing Level using, in lieu of a published level for the Index, the level for the Index as at that Index Business Day as determined by the Issuer in accordance with the formula for and method of calculating the Index last in effect prior to that change or failure, but using only those securities, contracts, commodities or currencies that comprised the Index immediately prior to that change or failure (other than those securities, contracts, commodities or currencies that have since ceased to be listed on the relevant exchange).

Sponsor

BNP Paribas Securities (Asia) Limited
59th-63rd Floors
Two International Finance Centre
8 Finance Street
Central, Hong Kong

PART C — PRODUCT CONDITIONS OF CASH SETTLED CALLABLE BULL/BEAR CONTRACTS OVER SINGLE UNIT TRUST

These Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document, subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of CBBCs may specify other terms and conditions which shall, to the extent so specified or to the extent inconsistent with these Product Conditions, replace or modify these Product Conditions for the purpose of such series of CBBCs. Capitalised terms used in these Product Conditions and not otherwise defined herein shall have the meaning given to them in the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Call Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Cash Settlement Amount**" means:

(a) following a Mandatory Call Event:

(i) in the case of a series of Category R CBBCs, the Residual Value; or

(ii) in the case of a series of Category N CBBCs, zero; and

(b) at expiry:

(i) in the case of a series of bull CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Closing Price – Strike Price) x one Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

(ii) In the case of a series of bear CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Strike Price – Closing Price) x one Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

For the avoidance of doubt, if the Cash Settlement Amount is a negative figure, it shall be deemed to be zero;

"**Category N CBBCs**" means a series of CBBCs where the Call Price is equal to the Strike Price;

"**Category R CBBCs**" means a series of CBBCs where the Call Price is different from the Strike Price;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the CCASS Rules, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Price**" means the closing price of one Unit, as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustment to such closing price as may be necessary to reflect any event as contemplated in Product Condition 4 such as capitalisation, rights issue, distribution or the like on the Valuation Date;

"**Day of Notification**" means the Trading Day immediately following the day on which a Mandatory Call Event occurs;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred in respect of the early expiration of CBBCs upon the occurrence of a Mandatory Call Event or exercise of CBBCs upon expiry;

"**General Conditions**" means the general terms and conditions set out in Appendix 1 of the Base Listing Document;

"**Last Trading Day**" means the trading day on the Stock Exchange immediately preceding the Expiry Date;

"**Mandatory Call Event**" means that the Spot Price of the Units on any Trading Day during the Observation Period is:

(a) in the case of a series of bull CBBCs, at or below the Call Price; or

(b) in the case of a series of bear CBBCs, at or above the Call Price;

"**Market Disruption Event**" means:

(a) the occurrence or existence on any Trading Day during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in (i) the Units; or (ii) any options or futures contracts relating to the Units if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(b) the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for the opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued; or

(c) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Maximum Trade Price**" means the highest Spot Price of the Units (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Product Condition 4 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

"**MCE Valuation Date**" means the last Trading Day during the MCE Valuation Period;

"**MCE Valuation Period**" means the period commencing from and including the moment upon which the Mandatory Call Event occurs (the trading session during which the Mandatory Call Event occurs is the "**1st Session**") and up to the end of the trading session on the Stock Exchange immediately following the 1st Session ("**2nd Session**") unless, in the determination of the Issuer in its good faith, the 2nd Session for any reason (including, without limitation, a Market Disruption Event occurring and subsisting in the 2nd Session) does not contain any continuous period of 1 hour or more than 1 hour during which trading in the Units is permitted on the Stock Exchange with no limitation imposed, the MCE Valuation Period shall be extended to the end of the subsequent trading session following the 2nd Session during which trading in the Units is permitted on the Stock Exchange with no limitation imposed for a continuous period of at least 1 hour notwithstanding the existence or continuance of a Market Disruption Event in such postponed trading session, unless the Issuer determines in its good faith that each trading session on each of the four Trading Days immediately following the date on which the Mandatory Call Event occurs does not contain any continuous period of 1 hour or more than 1 hour during which trading in the Units is permitted on the Stock Exchange with no limitation imposed.

In that case:

(a) the period commencing from the 1st Session up to, and including, the last trading session on the Stock Exchange of the fourth Trading Day immediately following the date on which the Mandatory Call Event occurs shall be deemed to be the MCE Valuation Period; and

(b) the Issuer shall determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) having regard to the then prevailing market conditions, the last reported Spot Price and such other factors as the Issuer may determine to be relevant in its good faith.

For the avoidance of doubt, all Spot Prices available throughout the extended MCE Valuation Period shall be taken into account to determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) for the calculation of the Residual Value.

For the purposes of this definition,

(A) the pre-opening session, the morning session and, in the case of half day trading, the closing auction session (if any) of the same day; and

(B) the afternoon session and the closing auction session (if any) of the same day,

shall each be considered as one trading session only;

"**Minimum Trade Price**" means the lowest Spot Price of the Units (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Product Condition 4 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

"**Number of CBBC(s) per Entitlement**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Observation Commencement Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Observation Period**" means the period commencing from and including the Observation Commencement Date up to and including the close of trading on the Stock Exchange on the Last Trading Day. For the avoidance of doubt, the Observation Period shall not be extended notwithstanding the Valuation Date shall not fall on the Last Trading Day;

"**Post MCE Trades**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Product Conditions**" means these product terms and conditions;

"**Residual Value**" means:

(a) In the case of a series of bull CBBCs:

$$\text{Residual Value per Board Lot} = \frac{\text{Entitlement x (Minimum Trade Price – Strike Price) x one Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

(b) In the case of a series of bear CBBCs:

$$\text{Residual Value per Board Lot} = \frac{\text{Entitlement x (Strike Price – Maximum Trade Price) x one Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after (i) the end of the MCE Valuation Period or (ii) the later of: (a) the Expiry Date; and (b) the day on which the Closing Price is determined in accordance with the Conditions (as the case may be);

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment of the Cash Settlement Amount (if any) electronically through CCASS to the Designated Bank Account;

"**Spot Price**" means:

(a) in respect of a continuous trading session of the Stock Exchange, the price per Unit concluded by means of automatic order matching on the Stock Exchange as reported in the official real-time dissemination mechanism for the Stock Exchange during such continuous trading session in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules); and

(b) in respect of a pre-opening session or a closing auction session (if applicable) of the Stock Exchange, as the case may be, the final Indicative Equilibrium Price (as defined in the Trading Rules) of the Unit (if any) calculated at the end of the pre-order matching period of such pre-opening session or closing auction session (if applicable), as the case may be, in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules),

subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Strike Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 4;

"**Trading Day**" means any day on which the Stock Exchange is scheduled to be open for trading for its regular trading sessions;

"**Trading Rules**" means the Rules and Regulations of the Exchange prescribed by the Stock Exchange from time to time;

"**Trust**" means the trust specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Unit**" means the unit specified as such in the relevant Launch Announcement and Supplemental Listing Document and "**Units**" shall be construed accordingly; and

"**Valuation Date**" means the Trading Day immediately preceding the Expiry Date unless, in the determination of the Issuer, a Market Disruption Event has occurred on that day in which case, the Valuation Date shall be the first succeeding Trading Day on which the Issuer determines that there is no Market Disruption Event, unless the Issuer determines that there is a Market Disruption Event occurring on each of the four Trading Days immediately following the original date which (but for the Market Disruption Event) would have been the Valuation Date. In that case:

(a) the fourth Trading Day immediately following the original date shall be deemed to be the Valuation Date (regardless of the Market Disruption Event); and

(b) the Issuer shall determine the Closing Price of the Units having regard to the then prevailing market conditions, the last reported trading price of the Units on the Stock Exchange and such other factors as the Issuer determines to be relevant.

Other capitalised terms shall, unless otherwise defined herein, have the meaning ascribed to them in the Base Listing Document, the General Conditions, the relevant Launch Announcement and Supplemental Listing Document or the Global Certificate.

2. Illegality or Impracticability

The Issuer is entitled to terminate the CBBCs if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the CBBCs, or for the Guarantor to perform its obligations under the Guarantee, in whole or in part as a result of:

(i) the adoption of, or any change in, any relevant law or regulation (including any tax law); or

(ii) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law),

(each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the CBBCs due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by the applicable law or regulation, pay to each Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each CBBC held by such Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement as determined by the Issuer in its sole and absolute discretion. Payment will be made to each Holder in such manner as shall be notified to the Holder in accordance with General Condition 7.

3. Exercise of CBBCs

3.1 *Exercise of CBBCs in Board Lots*

CBBCs may only be exercised in Board Lots or integral multiples thereof.

3.2 *Automatic Exercise*

If no Mandatory Call Event has occurred during the Observation Period, the CBBCs will be deemed to be automatically exercised on the Expiry Date.

3.3 *Mandatory Call Event*

(a) Subject to Product Condition 3.3(b), following a Mandatory Call Event, the CBBCs will be terminated automatically and the Issuer will give a notice of the Mandatory Call Event and early expiry of the CBBCs (the "**Announcement on MCE and Early Expiration**") to the Holders in accordance with General Condition 7. Trading in the CBBCs will be suspended immediately upon a Mandatory Call Event and all Post MCE Trades will be cancelled and will not be recognised by the Stock Exchange or the Issuer.

In the case of Category R CBBCs, the Issuer will give a notice of the valuation of the Residual Value (the "**Announcement on Valuation of Residual Value**") to the Holders before the end of the trading session immediately after the MCE Valuation Period in accordance with General Condition 7.

(b) A Mandatory Call Event is irrevocable unless it is triggered as a result of any of the following events:

(i) system malfunction or other technical errors of Hong Kong Exchanges and Clearing Limited; or

(ii) manifest errors caused by the relevant third party price source where applicable;

and

(A) in the case of a system malfunction or other technical errors prescribed in paragraph (i) above, such event is reported by the Stock Exchange to the Issuer, and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked, and

(B) in the case of an error by the relevant price source prescribed in paragraph (ii) above, such event is reported by the Issuer to the Stock Exchange, and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked,

in each case, such mutual agreement must be reached no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Day of Notification or such other time frame as prescribed by the Stock Exchange from time to time, in which case, (A) the Mandatory Call Event so triggered will be reversed; and (B) all cancelled trades (if any) will be reinstated and trading of the CBBCs will resume no later than the Trading Day immediately following the Day of Notification in accordance with the rules and/or requirements prescribed by the Stock Exchange from time to time.

3.4 ***Entitlement***

Every Board Lot of CBBCs entitles the Holder to receive from the Issuer on the Settlement Date the Cash Settlement Amount (if any).

3.5 ***Cancellation***

Upon early expiration of the CBBCs at the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date, the Issuer will, with effect from the first Business Day following the MCE Valuation Date or the Expiry Date (as the case may be) remove the name of the Holder from the Register in respect of the number of CBBCs which have expired or exercised (as the case may be) and thereby cancel the relevant CBBCs and if applicable, the Global Certificate.

3.6 ***Exercise Expenses***

(a) Any Exercise Expenses which were not determined by the Issuer:

(i) during the MCE Valuation Period following the Mandatory Call Event; or

(ii) otherwise, on the Expiry Date (as the case may be), and were not deducted from the Cash Settlement Amount prior to delivery to the Holder in accordance with Product Condition 3.7, shall be notified to the Holder as soon as practicable after determination thereof by the Issuer and shall be paid by the Holder to the Issuer immediately upon demand.

(b) Holders shall note that they shall be responsible for additional costs and expenses in connection with any early expiration or exercise of the CBBCs including the Exercise Expenses which amount shall, to the extent necessary, be payable to the Issuer and collected from the Holders.

3.7 ***Cash Settlement***

Upon early expiration of the CBBCs following the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date (as the case may be), the Issuer will, in respect of every Board Lot, pay the Cash Settlement Amount (net of any Exercise Expenses) (if any) to the relevant Holder. If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable by the Issuer.

The Cash Settlement Amount (net of any Exercise Expenses) (if any) will be despatched no later than the Settlement Date by crediting that amount, in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

3.8 ***Responsibility of Issuer, Guarantor and Sponsor***

None of the Issuer, the Guarantor, the Sponsor or their respective agents shall have any responsibility for any errors or omissions in the calculation and dissemination of any variables published by a third party and used in any calculation made pursuant to these Product Conditions or in the calculation of the Cash Settlement Amount arising from such errors or omissions.

The purchase of CBBCs does not confer on any Holder of such CBBCs any rights (whether in respect of voting, distributions or otherwise) in relation to the Units.

3.9 ***Liability of Issuer, Guarantor and Sponsor***

Exercise and settlement of the CBBCs is subject to all applicable laws, rules, regulations and guidelines in force at the relevant time and neither the Issuer, the Guarantor, nor the Sponsor shall incur any liability whatsoever if it is unable to effect the transactions contemplated, after using all reasonable efforts, as a result of any such laws, rules, regulations or guidelines. Neither the Issuer, the Guarantor, nor the Sponsor shall under any circumstances be liable for any acts or defaults of the CCASS in relation to the performance of its duties in relation to the CBBCs.

3.10 ***Trading***

Subject to Product Condition 3.3(b), trading in CBBCs on the Stock Exchange shall cease:

(a) immediately upon the occurrence of a Mandatory Call Event; or

(b) at the close of trading for the Trading Day immediately preceding the Expiry Date, whichever is the earlier.

4. Adjustments

4.1 ***Rights Issues***

If and whenever the Trust shall, by way of Rights (as defined below), offer new Units for subscription at a fixed subscription price to the holders of existing Units pro rata to existing holdings (a "**Rights Offer**"), the Entitlement will be adjusted to take effect on the Business Day ("**Rights Issue Adjustment Date**") on which trading in the Units becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E : Existing Entitlement immediately prior to the Rights Offer

S : Cum-Rights Unit price determined by the closing price on the Stock Exchange on the last Business Day on which Units are traded on a cum-Rights basis

R : Subscription price per Unit as specified in the Rights Offer plus an amount equal to any distributions or other benefits foregone to exercise the Rights

M : Number of new Unit(s) (whether a whole or a fraction) per existing Unit each holder thereof is entitled to subscribe

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Rights Issue Adjustment Date.

For the purposes of these Product Conditions:

"**Rights**" means the right(s) attached to each existing Unit or needed to acquire one new Unit (as the case may be) which are given to the holders of existing Units to subscribe at a fixed subscription price for new Units pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

4.2 ***Bonus Issues***

If and whenever the Trust shall make an issue of Units credited as fully paid to the holders of Units generally (other than pursuant to a scrip distribution or similar scheme for the time being operated by the Trust or otherwise in lieu of a cash distribution and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement will be increased on the Business Day ("**Bonus Issue Adjustment Date**") on which trading in the Units becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

Adjustment Factor = 1 + N

E : Existing Entitlement immediately prior to the Bonus Issue

N : Number of additional Units (whether a whole or a fraction) received by a holder of existing Units for each Unit held prior to the Bonus Issue

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Bonus Issue Adjustment Date.

4.3 ***Subdivisions or Consolidations***

If and whenever the Trust shall subdivide its Units or any class of its outstanding Units into a greater number of units (a "**Subdivision**") or consolidate the Units or any class of its outstanding Units into a smaller number of units (a "**Consolidation**"), then:

(i) in the case of a Subdivision, the Entitlement in effect immediately prior thereto will be increased whereas the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) will be decreased in the same ratio as the Subdivision; and

(ii) in the case of a Consolidation, the Entitlement in effect immediately prior thereto will be decreased whereas the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) will be increased in the same ratio as the Consolidation,

in each case on the day on which the Subdivision or Consolidation (as the case may be) shall have taken effect.

4.4 ***Merger or Consolidation***

If it is announced that the Trust is to or may merge or consolidate with or into any other trust or corporation (including becoming, by agreement or otherwise, controlled by any person or corporation) (except where the Trust is the surviving entity in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the CBBCs may in the absolute discretion of the Issuer be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion).

The rights attaching to the CBBCs after the adjustment shall, after such Restructuring Event, relate to the number of units of the trust(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Units, as the case may be, to which the holder of such number of Units to which the CBBCs related immediately before such Restructuring Event would have been entitled upon such Restructuring Event. Thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer, be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected.

For the avoidance of doubt, any remaining Units shall not be affected by this Product Condition 4.4 and, where cash is offered in substitution for Units or is deemed to replace Substituted Securities as described above, references in these Product Conditions to the Units shall include any such cash.

4.5 ***Cash Distribution***

No adjustment will be made for an ordinary cash distribution (whether or not it is offered with a scrip alternative) ("**Ordinary Distribution**"). For any other forms of cash distribution ("**Cash Distribution**") announced by the Trust, such as a cash bonus, special distribution or extraordinary distribution, no adjustment will be made unless the value of the Cash Distribution accounts for 2 per cent. or more of the Unit's closing price on the day of announcement by the Trust.

If and whenever the Trust shall make a Cash Distribution credited as fully paid to the holders of Units generally, the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Units becomes ex-entitlement in respect of the relevant Cash Distribution ("**Cash Distribution Adjustment Date**") in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

E : Existing Entitlement immediately prior to the Cash Distribution

S : The closing price of the Unit on the Stock Exchange on the Business Day immediately preceding the Cash Distribution Adjustment Date

CD : The Cash Distribution per Unit

OD : The Ordinary Distribution per Unit, provided that the date on which the Units are traded on an ex-Ordinary Distribution basis is the Cash Distribution Adjustment Date. For the avoidance of doubt, the OD shall be zero if the date on which the Units are traded on an ex-Ordinary Distribution basis is not the Cash Distribution Adjustment Date

In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Cash Distribution Adjustment Date.

5. Termination or Liquidation

In the event of a Termination, liquidation or dissolution of the trustee of the Trust (including any successor trustee appointed from time to time) ("**Trustee**") (in its capacity as trustee of the Trust) or the appointment of a liquidator, receiver or administrator or analogous person under Hong Kong law in respect of the whole or substantially the whole of the Trustee's undertaking, property or assets, all unexercised CBBCs will lapse and shall cease to be valid for any purpose. In the case of a Termination, the unexercised CBBCs will lapse and shall cease to be valid on the effective date of the Termination, in the case of voluntary liquidation, on the effective date of the relevant resolution and, in the case of an involuntary liquidation or dissolution, on the date of the relevant court order or, in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of its undertaking, property or assets, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of law.

For the purpose of this Product Condition 5, "**Termination**" means (i) the Trust is terminated, or the Trustee or the manager of the Trust (including any successor manager appointed from time to time) ("**Manager**") is required to terminate the Trust under the trust deed ("**Trust Deed**") constituting the Trust or applicable law, or the termination of the Trust commences; (ii) the Trust is held or is conceded by the Trustee or the Manager not to have been constituted or to have been imperfectly constituted; (iii) the Trustee ceases to be authorised under the Trust to hold the property of the Trust in its name and perform its obligations under the Trust Deed; or (iv) the Trust ceases to be authorised as an authorised collective investment scheme under the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong).

6. Delisting

6.1 *Adjustments following delisting*

If at any time the Units cease to be listed on the Stock Exchange, the Issuer shall give effect to these Product Conditions in such manner and make such adjustments to the rights attaching to the CBBCs as it shall, in its absolute discretion, consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Holders generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of any Holder or the tax or other consequences that may result in any particular jurisdiction).

6.2 *Listing on another exchange*

Without prejudice to the generality of Product Condition 6.1, where the Units are, or, upon the delisting, become, listed on any other stock exchange, these Product Conditions may, in the absolute discretion of the Issuer, be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Holders, make such adjustments to the entitlements of Holders on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

Sponsor

BNP Paribas Securities (Asia) Limited
59th-63rd Floors
Two International Finance Centre
8 Finance Street
Central, Hong Kong

APPENDIX 4 — A BRIEF GUIDE TO CREDIT RATINGS

Information set out in this Appendix 4 is based on, extracted or reproduced from the website of S&P at https://www.spratings.com/en_US/home, the website of Moody's at https://www.moodys.com and the website of Fitch at https://www.fitchratings.com/site/home, as of 2 April 2019. Information appearing on those websites does not form part of this document, and we accept no responsibility for the accuracy or completeness of the information appearing on those websites, except that we have accurately extracted and reproduced such information in this Appendix 4 and take responsibility for such extraction and reproduction. We have not separately verified such information. There can be no assurance that such information will not be revised by the relevant rating agency in the future and we have no responsibility to notify you of such change. If you are unsure about any information provided in this Appendix 4 and/or what a credit rating means, you should seek independent professional advice.

What is a credit rating?

A credit rating is a forward looking opinion by a credit rating agency of a company's overall ability to meet its financial obligations. The focus is on the company's capacity to pay its debts as they become due. The rating does not necessarily apply to any specific obligation.

What do the credit ratings mean?

Below are guidelines issued by S&P, Moody's and Fitch on what each of their investment-grade ratings means as of 2 April 2019.

S&P long-term issuer credit ratings

AAA

An obligor rated 'AAA' has extremely strong capacity to meet its financial commitments. 'AAA' is the highest issuer credit rating assigned by S&P.

AA

An obligor rated 'AA' has very strong capacity to meet its financial commitments. It differs from the highest-rated obligors only to a small degree.

A

An obligor rated 'A' has strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in higher-rated categories.

BBB

An obligor rated 'BBB' has adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to weaken the obligor's capacity to meet its financial commitments.

Plus (+) or minus (-)

The above ratings (except for 'AAA') may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories.

Please refer to https://www.spratings.com/en_US/understanding-ratings for further details.

Moody's long-term ratings definitions

Aaa

Obligations rated Aaa are judged to be of the highest quality, subject to the lowest level of credit risk.

Aa

Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.

A

Obligations rated A are considered upper-medium grade and are subject to low credit risk.

Baa

Obligations rated Baa are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.

Modifiers "1", "2" and "3"

Moody's appends numerical modifiers 1, 2 and 3 to each of the above generic rating classifications (except for Aaa). The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.

Please refer to https://www.moodys.com/Pages/amr002002.aspx for further details.

Fitch's long-term ratings definitions

AAA

Highest credit quality. 'AAA' ratings denote the lowest expectation of default risk. They are assigned only in cases of exceptionally strong capacity for payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.

AA

Very high credit quality. 'AA' ratings denote expectations of very low default risk. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.

A

High credit quality. 'A' ratings denote expectations of low default risk. The capacity for payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings.

BBB

Good credit quality. 'BBB' ratings indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity.

Modifiers "+" and "-"

The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories. Such suffixes are not added to the 'AAA' long-term rating category.

Please refer to https://www.fitchratings.com/web_content/ratings/fitch_ratings_definitions_and_scales.pdf for further details.

Rating Outlooks

A rating outlook indicates the potential direction of a long-term credit rating over the intermediate term (for example, this is typically six months to two years for S&P, whereas for Fitch it is a one to two year period). A rating outlook issued by S&P or Moody's will usually indicate whether the potential direction is likely to be "positive", "negative", "stable" or "developing" whereas a rating outlook issued by Fitch will usually indicate whether the potential direction is likely to be "positive", "negative", "stable" or "evolving". Please refer to the abovementioned websites of the relevant credit rating agencies for further details regarding rating outlooks published by the relevant credit rating agencies.

APPENDIX 5 — AUDITORS' REPORT AND THE GUARANTOR'S CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2018

The information in this Appendix 5 is the Guarantor's Consolidated Financial Statements for the year ended 31 December 2018. Auditors' report and the Guarantor's Consolidated Financial Statements for the year ended 31 December 2018 are free English translations of the French original versions. References to page numbers on the following pages are to the page numbers of such Consolidated Financial Statements. We draw your attention to the fact that the information presented in Chapter 5 of the Guarantor's registration document and identified by the word "Audited", which is an integral part of the notes to the Guarantor's consolidated financial statements, is not included in the Base Listing Document. The Auditors' report only covers the Guarantor's consolidated financial statements as at 31 December 2018 and for the year then ended, including the information referred to above which is an integral part of those financial statements.

BNP Paribas SA

Statutory Auditors' report
on the consolidated financial statements

(For the year ended 31 December 2018)

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
6, place de la Pyramide	63, rue de Villiers	61, rue Henri Regnault
92908 Paris La Défense Cedex	92208 Neuilly-sur-Seine Cedex	92400 Courbevoie

For the year ended 31 December 2018

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,
BNP Paribas SA
16 boulevard des Italiens
75009 PARIS

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying consolidated financial statements of BNP Paribas SA for the year ended 31 December 2018.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group at 31 December 2018 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Financial Statements Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us for the period from 1 January 2018 to the date of our report, and, in particular, we did not provide any non audit services prohibited by article 5(1) of Regulation (EU) No 537/2014 or the French Code of Ethics (*Code de déontologie*) for Statutory Auditors.

Emphasis of matter

Without qualifying our opinion, we draw your attention to Notes 1.a.1 and 2 to the consolidated financial statements, which describe the impact on the consolidated financial statements for the year ended 31 December 2018 of the changes in presentation and the application of IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from contracts with customers".

Justification of assessments – Key audit matters

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were the most significant in our audit of the consolidated financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the consolidated financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the consolidated financial statements.

Assessment of the impacts of the first-time application of IFRS 9 – Financial instruments *(See Notes 1.a.1, 1.e.5, 1.e.6, 2b, 3.a, 3.c, 3.d, 3.h and 5.a to 5.h to the consolidated financial statements)*	
Description of risk	**How our audit addressed this risk**
The Group applied IFRS 9 (phases I and II), which replaces IAS 39 "Financial Instruments: Recognition and Measurement", from 1 January 2018 to its financial assets and liabilities, with the exception of those of the Insurance business line. This standard significantly changes the rules concerning the classification, measurement and impairment of financial assets. In particular, the calculation of impairment losses according to the expected credit losses model requires management to exercise judgement, as described below. The first-time application of IFRS 9 led BNP Paribas to recognise a negative impact of EUR 2.5 billion, net of tax, in equity, to publish an opening balance sheet at 1 January 2018 and to provide detailed disclosures on the transition from the balance sheet at 31 December 2017 prepared under IAS 39 to the opening balance sheet at 1 January 2018 prepared under IFRS 9 (excluding insurance assets and liabilities). Determining this impact and detailed information required reliance on many assumptions and judgements as well as new operating processes. Given the complexity of the application of IFRS 9 and the significance of the information published, we deemed the determination of the impact of the first-time application of IFRS 9 and the related disclosures to be a key audit matter.	We assessed the procedures deployed by BNP Paribas to implement the new standard. We asked our experts to assess the analyses performed and the models used by BNP Paribas to apply the new IFRS 9 accounting principles. With respect to the classification and measurement of assets and liabilities, our work consisted in: – examining the analyses performed and the accounting principles defined by the Group and their implementation by the main business lines; – based on a sample of contracts, verifying the analysis prepared by BNP Paribas as regards the classification of financial assets; – assessing the models used for managing financial assets. With respect to expected credit losses, our audit work consisted in: – assessing the compliance of BNP Paribas' accounting principles with IFRS 9 and the methods implemented by the business lines by examining the independent verifications performed internally where appropriate; – based on a sample of models, assessing the implementation of said models in IT systems and the financial reporting; – performing an independent calculation of the expected losses based on a sample of contracts. We also assessed the appropriateness of the disclosures provided in the notes to the consolidated financial statements in relation to the impact of the first-time application of IFRS 9.

<table>
<tr><td colspan="2">Assessment of credit risk and measurement of impairment losses (stages 1, 2 and 3)
(See Notes 1.e.5, 1.e.6, 1.o, 3.h, 5.e, 5.f, 5.g, 5.h and 5.p to the consolidated financial statements)</td></tr>
<tr><td>Description of risk</td><td>How our audit addressed this risk</td></tr>
<tr><td>BNP Paribas recognises impairment losses to hedge the credit risks inherent to its banking intermediation activities.

As from 1 January 2018, these impairment losses are determined in accordance with IFRS 9 and the expected credit losses model.

The measurement of expected credit losses on customer loan portfolios requires management to exercise judgement, in particular in order to:

– assess the significant deterioration of credit risk to classify outstandings in stage 1, stage 2, or stage 3;

– estimate the amount of expected losses according to the different stages;

– prepare macro-economic projections which are integrated into both the criteria for recognising deterioration and in the measurement of expected losses.

At 31 December 2018, total outstanding customer loans exposed to credit risk amounted to EUR 790 billion; total impairment losses stood at EUR 24.1 billion.

We deemed the assessment of credit risk and the measurement of impairment losses to be a key audit matter insofar as management is required to exercise judgement and make estimates to assess credit risk, in particular as regards credit granted to companies given the potentially substantial amounts of the outstanding loans concerned.</td><td>We concentrated our work on the most significant outstandings and/ or portfolios at the reporting date as well as on the credit granted to companies operating in more sensitive economic sectors or geographic regions.

We assessed the relevance of BNP Paribas' internal control system and tested the manual and computerised controls for assessing credit risk and measuring expected losses.

During our work, we focused on:

– Classification of outstandings by stage: we assessed the relevance and the correct application of the indicators used by the various business lines to measure significant increases in credit risk, in particular as regards the rating of corporate counterparties;

– Measurement of expected losses (stages 1, 2 and 3);

    – assisted by our credit risk experts and relying on the internal system for independent validation of the Group's models, we assessed the methodologies as well as the assumptions underlying the macro-economic projections used by BNP Paribas across the various scopes, the proper integration of said projections into the information system and the effectiveness of the data quality controls;

    – with regard to impairment losses specific to outstanding loans to companies classified n stage 3, we verified that a periodic review of the counterparties under surveillance had been carried out by BNP Paribas and based on a sample, assessed the assumptions and data used by management to estimate impairment.

In addition, we examined the disclosures in the notes to the consolidated financial statements with respect to credit risk and particularly the new disclosures required as a result of the application of IFRS 9.</td></tr>
</table>

<table>
<tr><td colspan="2">Valuation of financial instruments
(See Notes 1.e.2, 1.e.7, 1.e.10, 1.o, 3.a, 3.c, 3.d, 5.a, 5.b and 5.d to the consolidated financial statements)</td></tr>
<tr><td>Description of risk</td><td>How our audit addressed this risk</td></tr>
<tr><td>As part of its trading activities, BNP Paribas holds financial instruments (assets and liabilities) which are recognised in the balance sheet at market value.

Market value is determined according to different approaches, depending on the type of instrument and its complexity: (i) using directly observable quoted prices (instruments classified in level 1 of the fair value hierarchy); (ii) using valuation models whose main inputs are observable (instruments classified in level 2); and (iii) using valuation models whose main inputs are unobservable (instruments classified in level 3).

The valuations obtained may be subject to additional value adjustments to take into account certain specific trading, liquidity or counterparty risks.

The techniques adopted by management to measure these instruments may therefore involve significant judgement as regards the models and data used.

At 31 December 2018, financial instruments represented EUR 604 billion (of which EUR 11.9 billion for level 3 instruments) under assets and EUR 572 billion (of which EUR 24.9 billion for level 3 instruments) under liabilities.

In light of the materiality of the outstandings and the judgement used to determine market value, we deemed the measurement of financial instruments to be a key audit matter, in particular the measurement of level 3 instruments given the use of unobservable inputs.</td><td>Assisted by our valuation experts, we verified that the key controls used by BNP Paribas with respect to the valuation of financial instruments function properly, in particular those relating to:

– the approval and regular review by management of the risks of the valuation models;

– the independent verification of the valuation inputs;

– the determination of value adjustments.

Based on a sample, our valuation experts:

– analysed the relevance of the assumptions and inputs used;

– analysed the results of the independent verification of the inputs by BNP Paribas;

– performed independent counter valuations using our own models.

We also analysed on a sample basis any differences between the valuations obtained and collateral calls with counterparties.

In addition, we examined the disclosures in the notes to the consolidated financial statements with respect to the valuation of financial instruments.</td></tr>
</table>

<table>
<tr><td colspan="2">Goodwill impairment
(See Notes 1.b.4 and 5.o to the consolidated financial statements)</td></tr>
<tr><td>Description of risk</td><td>How our audit addressed this risk</td></tr>
<tr><td>When recognising acquisitions, BNP Paribas records goodwill under assets, corresponding to the excess of the acquisition price of the shares over the value of the Group's interest. At 31 December 2018, goodwill amounted to EUR 8.5 billion.

Goodwill is tested for impairment at least once a year or more frequently if there is an indication of impairment. Comparing the carrying amount of the cash-generating units to which goodwill is allocated with their recoverable amount is a key step in the process of determining if an impairment charge should be recorded.

We deemed goodwill impairment to be a key audit matter because management is required to exercise judgement to measure the recoverable amount of the cash-generating units, which involves making assumptions as regards the future earnings of acquirees and the discount rates applied to projected cash flows.</td><td>Our audit approach consisted in assessing the procedures implemented within BNP Paribas to test goodwill for impairment as well as the controls designed to identify indications of goodwill impairment.

Assisted by our valuation experts, our work on the goodwill balances at 31 December 2018 consisted primarily in:

– analysing the methods adopted by BNP Paribas;

– critically assessing the provisional business plans approved by Executive Management to ensure the reasonableness of the future cash flow estimates set out therein (in particular when projections do not match past performance);

– critically analysing the main assumptions and inputs used (growth rate, cost of capital and discount rate) with respect to available external information;

– assessing the analyses of the sensitivity of estimates to key inputs (in particular when the recoverable amount approximates the carrying amount).

Lastly, we verified the appropriateness of the disclosures in the notes to the consolidated financial statements with respect to the results of impairment and sensitivity tests.</td></tr>
</table>

<table>
<tr><td colspan="2">Analysis of legal risk with respect to regulatory and administrative investigations and to class actions
(See Notes 1.o, 3.h, 5.p and 8.b to the consolidated financial statements)</td></tr>
<tr><td>Description of risk</td><td>How our audit addressed this risk</td></tr>
<tr><td>In each of the countries where it is present, BNP Paribas is subject to the regulations applicable to the sectors in which it operates. If the Group does not comply with the applicable laws and regulations, it may be exposed to significant fines and other administrative and criminal sanctions. It may also incur losses as a result of private legal disputes in connection with or unrelated to these sanctions.

Any provision recognised to cover the consequences of investigations into non-compliance with certain regulations requires judgement due to the difficulty in estimating the outcome of regulatory procedures.

Any provisions with respect to class actions or other private legal disputes also requires management to exercise judgement.

In light of the increase in regulatory and administrative investigations and class actions brought against financial establishments in recent years and of the significant judgement exercised by management to determine the amount of provisions recognised, we deemed this risk to be a key audit matter.</td><td>We were informed of the procedure for identifying and assessing legal risk with respect to regulatory and administrative investigations and to class actions, in particular through quarterly interviews with BNP Paribas' legal functions.

Our work consisted primarily in:

– obtaining an understanding of the analyses prepared by the financial and legal departments at the end of each quarterly accounting period;

– interviewing the specialised law firms with which BNP Paribas works when subject to legal disputes.</td></tr>
</table>

<table>
<tr><td colspan="2" align="center">General IT controls</td></tr>
<tr><td>Description of risk</td><td>How our audit addressed this risk</td></tr>
<tr><td>The reliability and security of IT systems plays a key role in the preparation of BNP Paribas' consolidated financial statements.

We thus deemed the assessment of the general IT controls and the application controls specific to the information processing chains that contribute to the preparation of accounting and financial information to be a key audit matter.

In particular, a system for controlling access rights to IT systems and authorisation levels based on employee profiles represents a key control for limiting the risk of inappropriate changes to applications' settings or underlying data.</td><td>For the main systems used to prepare accounting and financial information, assisted by our IT specialists, our work consisted primarily in:

– obtaining an understanding of the systems, processes and controls which underpin accounting and financial data;

– assessing the general IT controls (application and data access management, application changes/developments management and IT operations management) on key systems (in particular accounting, consolidation and automatic reconciliation applications);

– examining the controls for the authorisation of manual accounting entries;

– performing additional audit procedures, where appropriate.</td></tr>
</table>

<table>
<tr><th colspan="2">Technical reserves of insurance companies
(See Notes 1.f.3 and 5.j to the consolidated financial statements)</th></tr>
<tr><th>Description of risk</th><th>How our audit addressed this risk</th></tr>
<tr><td>At the year-end, a liability adequacy test is performed for BNP Paribas’ insurance activities.

This test consists in comparing insurance liabilities (or technical reserves) recognised in the balance sheet with projected net future cash flows. In the hypothetical event that the carrying amount of the insurance liabilities were not sufficient, an additional liability would have to be recognised.

At 31 December 2018, total technical insurance reserves amounted to EUR 213.7 billion.

The end-2018 test confirmed that the carrying amount of the reserves was sufficient.

We deemed the implementation of the liability adequacy test for the Savings business to be a key audit matter because it involves using actuarial models as well as modelling options and guarantees which are specific to BNP Paribas and requires management to exercise judgement to determine certain key assumptions (e.g., return on assets, surrender rate and fees).</td><td>Based on a sample, we assessed the amount of net future cash flows used in the calculation, in particular by:

● assessing the validity of the data on asset portfolios and contracts used as a starting point for the modelling exercise;

● identifying the main changes made to the actuarial models, assessing the relevance of said changes and obtaining an understanding of their impact on the result of the test;

● analysing differences in the model results between 2017 and 2018 using analyses prepared by BNP Paribas. We verified that the most material differences were justified by changes in the portfolio, the assumptions or the models.

We also examined the disclosures in the notes to the consolidated financial statements with respect to insurance liabilities.</td></tr>
</table>

Specific verifications

As required by legal and regulatory provisions and in accordance with professional standards applicable in France, we have also verified the information pertaining to the Group presented in the Board of Directors’ management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

We attest that the Group management report includes the consolidated non-financial information statement required under article L.225-102-1 of the French Commercial Code. However, in accordance with article L.823-10 of the French Commercial Code, we have not verified the fair presentation and consistency with the consolidated financial statements of the information given in that statement, which will be the subject of a report by an independent third party.

Report on other legal and regulatory requirements

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of BNP Paribas SA by the Annual General Meetings held on 23 May 2006 for Deloitte & Associés, 26 May 1994 for PricewaterhouseCoopers Audit and 23 May 2000 for Mazars.

At 31 December 2018, Deloitte & Associés, PricewaterhouseCoopers Audit and Mazars were in the thirteenth, the twenty-fifth and the nineteenth consecutive year of their uninterrupted engagement, respectively.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for preparing consolidated financial statements giving a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and for implementing the internal control procedures it deems necessary for the preparation of consolidated financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Financial Statements Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements

Objective and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions taken by users on the basis of these consolidated financial statements.

As specified in article L.823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgement throughout the audit.

They also:

- identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;

- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the consolidated financial statements;

- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;

- evaluate the overall presentation of the consolidated financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;

- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The Statutory Auditors are responsible for the management, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed thereon.

Report to the Financial Statements Committee

We submit a report to the Financial Statements Committee which includes, in particular, a description of the scope of the audit and the audit programme implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Financial Statements Committee includes the risks of material misstatement that, in our professional judgement, were the most significant for the audit of the consolidated financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Financial Statements Committee with the declaration provided for in article 6 of Regulation (EU) No 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in articles L.822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Financial Statements Committee.

Paris La Défense, Neuilly-sur-Seine and Courbevoie, 5 March 2019	**Deloitte et Associés** Laurence Dubois	**Mazars** Virginie Chauvin
The Statutory Auditors	**PricewaterhouseCoopers Audit** Patrice Morot	

CONSOLIDATED FINANCIAL STATEMENTS

Year ended 31 December 2018

BNP PARIBAS

The bank
for a changing
world

CONTENTS

CONSOLIDATED FINANCIAL STATEMENTS
Prepared in accordance with IFRS as adopted by the European Union

The consolidated financial statements of the BNP Paribas Group are presented for the years ended 31 December 2018 and 31 December 2017. In accordance with Article 20.1 of Annex I of European Commission Regulation (EC) 809/2004, the consolidated financial statements for the year ended 31 December 2016 are provided in the registration document filed with the Autorité des marchés financiers on 6 March 2018 under number D.18-0104.

IFRS 9 and IFRS 15 are applicable retrospectively as from 1 January 2018 and introduce the option not to restate the comparative figures for prior periods. Since the Group has retained this option, the comparative financial statements for 2017 have not been restated for these changes in method.
Presentation changes have however been performed on these comparative figures in order to present separately the assets and liabilities related to insurance activities and to harmonise item headings with those established by IFRS 9. These changes are described in note 2.a. Moreover, the synthetic balance sheet includes a comparative reference as at 1 January 2018 which takes into account the impacts of the IFRS 9 and IFRS 15 adoption (note 2.b). Comparative figures presented in the notes to the financial statements related to balance sheet items (note 5) are based on that reference.

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2018

In millions of euros	Notes	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017[1] *IAS 39*
Interest income	3.a	35,723	33,566
Interest expense	3.a	(14,661)	(12,375)
Commission income	3.b	12,925	12,943
Commission expense	3.b	(3,718)	(3,513)
Net gain on financial instruments at fair value through profit or loss	3.c	5,808	5,346
Net gains on financial instruments at fair value through equity	3.d	315	1,711
Net gains on derecognised financial assets at amortised cost	3.d	(5)	55
Net income from insurance activities	3.e	4,064	3,813
Income from other activities	3.f	12,324	11,697
Expense on other activities	3.f	(10,259)	(10,082)
REVENUES		**42,516**	**43,161**
Salary and employee benefit expense	7.a	(16,617)	(16,496)
Other operating expenses	3.g	(12,290)	(11,729)
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	5.n	(1,676)	(1,719)
GROSS OPERATING INCOME		**11,933**	**13,217**
Cost of risk	3.h	(2,764)	(2,907)
OPERATING INCOME		**9,169**	**10,310**
Share of earnings of equity-method entities	5.m	628	713
Net gain on non-current assets		358	488
Goodwill	5.o	53	(201)
PRE-TAX INCOME		**10,208**	**11,310**
Corporate income tax	3.i	(2,203)	(3,103)
NET INCOME		**8,005**	**8,207**
Net income attributable to minority interests		479	448
NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS		**7,526**	**7,759**
Basic earnings per share	8.a	5.73	6.05
Diluted earnings per share	8.a	5.73	6.05

[1] Revised presentation based on the reclassifications and the re-labelling within Net Banking Income described in note 2a: re-labelling of "net gains on available-for sale financial assets and other assets not measured at fair value" to "net gains on financial assets at fair value through equity" and "net gains on derecognised financial assets at amortised cost", reclassification of items related to insurance activities within "Net income from insurance activities" and reclassification of interest on trading instruments within "Net gains on financial instruments at fair value through profit or loss".

STATEMENT OF NET INCOME AND CHANGES IN ASSETS AND LIABILITIES RECOGNISED DIRECTLY IN EQUITY

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017[1] *IAS 39*
Net income for the period	**8,005**	**8,207**
Changes in assets and liabilities recognised directly in equity	**(1,315)**	**(3,019)**
Items that are or may be reclassified to profit or loss	**(1,404)**	**(3,171)**
- Changes in exchange differences	(159)	(2,589)
- Changes in fair value of financial assets at fair value through equity		
Changes in fair value recognised in equity	*(461)*	*679*
Changes in fair value reported in net income	*(110)*	*(837)*
- Changes in fair value of investments of insurance activities		
Changes in fair value recognised in equity	*(530)*	*(243)*
Changes in fair value reported in net income	*(99)*	*(25)*
- Changes in fair value of hedging instruments		
Changes in fair value recognised in equity	*(406)*	*(237)*
Changes in fair value reported in net income	*(7)*	*4*
- Income tax	505	426
- Changes in equity-method investments	(137)	(349)
Items that will not be reclassified to profit or loss	**89**	**152**
- Changes in fair value of equity instruments designated as at fair value through equity	(148)	
- Debt remeasurement effect arising from BNP Paribas Group issuer risk	195	
- Remeasurement gains (losses) related to post-employment benefit plans	137	177
- Income tax	(96)	(25)
- Changes in equity-method investments	1	
Total	**6,690**	**5,188**
- Attributable to equity shareholders	6,215	4,956
- Attributable to minority interests	475	232

[1] Revised presentation, including the changes described in note 2a: reallocation of "changes in fair value of available-for-sale financial assets, including those reclassified as loans and receivables" related to insurance activities into "changes in fair value of investments of insurance activities" and the re-labelling of "changes in fair value of available-for-sale financial assets, including those reclassified as loans and receivables" into "changes in fair value of financial instruments at fair value through equity".

BALANCE SHEET AT 31 DECEMBER 2018

In millions of euros	Notes	31 December 2018 IFRS 9 & IFRS 15	1 January 2018 [1] IFRS 9 & IFRS 15	31 December 2017[2] IAS 39
ASSETS				
Cash and balances at central banks		185,119	178,433	178,446
Financial instruments at fair value through profit or loss				
Securities	5.a	121,954	130,326	122,964
Loans and repurchase agreements	5.a	183,716	144,948	143,988
Derivative financial instruments	5.a	232,895	229,896	229,897
Derivatives used for hedging purposes	5.b	9,810	13,721	13,723
Financial assets at fair value through equity				
Debt securities	5.c	53,838	53,942	110,881
Equity securities	5.c	2,151	2,330	6,928
Financial assets at amortised cost				
Loans and advances to credit institutions	5.e	19,556	20,356	20,405
Loans and advances to customers	5.e	765,871	731,176	735,013
Debt securities	5.e	75,073	69,426	15,378
Remeasurement adjustment on interest-rate risk hedged portfolios		2,787	3,064	3,064
Financial investments of insurance activities	5.i	232,308	227,712	227,712
Current and deferred tax assets	5.k	7,220	7,368	6,568
Accrued income and other assets	5.l	103,346	92,961	92,875
Equity-method investments	5.m	5,772	6,221	6,426
Property, plant and equipment and investment property	5.n	26,652	25,000	25,000
Intangible assets	5.n	3,783	3,327	3,327
Goodwill	5.o	8,487	9,571	9,571
Non-current assets held for sale	8.c	498		
TOTAL ASSETS		**2,040,836**	**1,949,778**	**1,952,166**
LIABILITIES				
Deposits from central banks		1,354	1,471	1,471
Financial instruments at fair value through profit or loss				
Securities	5.a	75,189	67,087	67,087
Deposits and repurchase agreements	5.a	204,039	174,645	174,645
Issued debt securities	5.a	54,908	50,490	50,490
Derivative financial instruments	5.a	225,804	227,644	227,644
Derivatives used for hedging purposes	5.b	11,677	15,682	15,682
Financial liabilities at amortised cost				
Deposits from credit institutions	5.g	78,915	76,503	76,503
Deposits from customers	5.g	796,548	760,941	760,941
Debt securities	5.h	151,451	148,156	148,156
Subordinated debt	5.h	17,627	15,951	15,951
Remeasurement adjustment on interest-rate risk hedged portfolios		2,470	2,372	2,372
Current and deferred tax liabilities	5.k	2,255	2,234	2,466
Accrued expenses and other liabilities	5.l	89,562	80,472	79,994
Technical reserves and other insurance liabilities	5.j	213,691	210,494	210,494
Provisions for contingencies and charges	5.p	9,620	11,084	11,061
TOTAL LIABILITIES		**1,935,110**	**1,845,226**	**1,844,957**
EQUITY				
Share capital, additional paid-in capital and retained earnings		*93,431*	*89,880*	*91,026*
Net income for the period attributable to shareholders		*7,526*	*7,759*	*7,759*
Total capital, retained earnings and net income for the period attributable to shareholders		**100,957**	**97,639**	**98,785**
Changes in assets and liabilities recognised directly in equity		510	1,787	3,198
Shareholders' equity		**101,467**	**99,426**	**101,983**
Minority interests	8.d	**4,259**	**5,126**	**5,226**
TOTAL EQUITY		**105,726**	**104,552**	**107,209**
TOTAL LIABILITIES AND EQUITY		**2,040,836**	**1,949,778**	**1,952,166**

(1) As of 1 January 2018 after implementation of IFRS 9 and IFRS 15, as described in note 2.b.

(2) Revised presentation, based on reclassifications and adjustments detailed in note 2.a, mainly related to the re-labelling of financial instruments item headings, the reclassification of financial instruments of insurance activities into "Investments of insurance activities", and the impact of securities recognition at settlement date.

CASH FLOW STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2018

In millions of euros	Notes	Year to 31 Dec. 2018 IFRS 9 & IFRS 15	Year to 31 Dec. 2017 IAS 39
Pre-tax income		**10,208**	**11,310**
Non-monetary items included in pre-tax net income and other adjustments		**9,713**	**19,811**
Net depreciation/amortisation expense on property, plant and equipment and intangible assets		5,144	4,550
Impairment of goodwill and other non-current assets		(133)	190
Net addition to provisions		10,210	10,021
Share of earnings of equity-method entities		(628)	(713)
Net (income) from investing activities		(660)	(453)
Net expense (income) from financing activities		(501)	355
Other movements		(3,719)	5,861
Net decrease in cash related to assets and liabilities generated by operating activities		**(20,439)**	**(2,154)**
Net decrease in cash related to transactions with customers and credit institutions		(1,104)	(10,253)
Net increase (decrease) in cash related to transactions involving other financial assets and liabilities		(13,276)	16,079
Net decrease in cash related to transactions involving non-financial assets and liabilities		(4,823)	(6,107)
Taxes paid		(1,236)	(1,873)
NET INCREASE (DECREASE) IN CASH AND EQUIVALENTS GENERATED BY OPERATING ACTIVITIES		**(518)**	**28,967**
Net increase in cash related to acquisitions and disposals of consolidated entities		3,152	527
Net decrease related to property, plant and equipment and intangible assets		(1,827)	(1,347)
NET INCREASE (DECREASE) IN CASH AND EQUIVALENTS RELATED TO INVESTING ACTIVITIES		**1,325**	**(820)**
Decrease in cash and equivalents related to transactions with shareholders		(4,039)	(3,457)
Increase in cash and equivalents generated by other financing activities		9,865	308
NET INCREASE (DECREASE) IN CASH AND EQUIVALENTS RELATED TO FINANCING ACTIVITIES		**5,826**	**(3,149)**
EFFECT OF MOVEMENT IN EXCHANGE RATES ON CASH AND EQUIVALENTS		**1,529**	**(5,900)**
NON-MONETARY IMPACTS FROM NON-CURRENT ASSETS HELD FOR SALE		**(700)**	**-**
NET INCREASE IN CASH AND EQUIVALENTS		**7,462**	**19,098**
Balance of cash and equivalent accounts at the start of the period		**175,061**	**155,963**
Cash and amounts due from central banks		178,446	160,400
Due to central banks		(1,471)	(233)
On demand deposits with credit institutions		8,063	6,513
On demand loans from credit institutions	5.g	(9,906)	(10,775)
Deduction of receivables and accrued interest on cash and equivalents		(71)	58
Balance of cash and equivalent accounts at the end of the period		**182,523**	**175,061**
Cash and amounts due from central banks		185,134	178,446
Due to central banks		(1,354)	(1,471)
On demand deposits with credit institutions		8,813	8,063
On demand loans from credit institutions	5.g	(10,571)	(9,906)
Deduction of receivables and accrued interest on cash and equivalents		501	(71)
NET INCREASE IN CASH AND EQUIVALENTS		**7,462**	**19,098**

STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss			
In millions of euros	Share capital and additional paid-in-capital	Undated Super Subordinated Notes	Non-distributed reserves	Total	Financial assets designated as at fair value through equity	Own-credit valuation adjustment of debt securities designated as at fair value through profit or loss	Remeasurement gains (losses) related to post-employment benefits plans	Total
Capital and retained earnings at 31 December 2016	**26,948**	**8,430**	**59,118**	**94,496**				**-**
Appropriation of net income for 2016			**(3,369)**	**(3,369)**				**-**
Increases in capital and issues	88	636	(2)	722				-
Reduction or redemption of capital		(927)	64	(863)				-
Movements in own equity instruments	15	33	(10)	38				-
Share-based payment plans			3	3				-
Remuneration on preferred shares and undated super subordinated notes			(311)	(311)				-
Impact of internal transactions on minority shareholders (note 8.d)			1	1				-
Movements in consolidation scope impacting minority shareholders (note 8.d)				-				-
Acquisitions of additional interests or partial sales of interests (note 8.d)			253	253				-
Change in commitments to repurchase minority shareholders' interests				-				-
Other movements			(34)	(34)				-
Changes in assets and liabilities recognised directly in equity			158	158				-
Net income for 2017			**7,759**	**7,759**				**-**
Interim dividend payments				-				-
Capital and retained earnings at 31 December 2017	**27,051**	**8,172**	**63,630**	**98,853**				**-**
Revised presentation (note 2.a)			(68)	(68)			68	68
Capital and retained earnings at 31 December 2017 new presentation	**27,051**	**8,172**	**63,562**	**98,785**			**68**	**68**
IFRS 9 impacts (note 2.b)			(1,122)	(1,122)	561	(323)		238
IFRS 15 impacts (note 2.b)			(24)	(24)				-
Capital and retained earnings at 1 January 2018	**27,051**	**8,172**	**62,416**	**97,639**	**561**	**(323)**	**68**	**306**
Appropriation of net income for 2017			**(3,772)**	**(3,772)**				**-**
Increases in capital and issues	49	660	(2)	707				-
Reduction or redemption of capital		(600)		(600)				-
Movements in own equity instruments	(64)	(2)	(142)	(208)				-
Share-based payment plans			2	2				-
Remuneration on preferred shares and undated super subordinated notes			(356)	(356)				-
Impact of internal transactions on minority shareholders (note 8.d)			6	6				-
Movements in consolidation scope impacting minority shareholders (note 8.d)			(37)	(37)			37	37
Acquisitions of additional interests or partial sales of interests (note 8.d)			71	71			9	9
Change in commitments to repurchase minority shareholders' interests			(6)	(6)				-
Other movements			(8)	(8)				-
Realised gains or losses reclassified to retained earnings			(7)	(7)		7		7
Changes in assets and liabilities recognised directly in equity				-	(158)	134	96	72
Net income for 2018			**7,526**	**7,526**				**-**
Interim dividend payments				-				-
Capital and retained earnings at 31 December 2018	**27,036**	**8,230**	**65,691**	**100,957**	**403**	**(182)**	**210**	**431**

BETWEEN 1 JAN. 2017 AND 31 DECEMBER 2018

Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss					Total shareholders' equity	Minority interests *(note 8.d)*	Total equity
Exchange difference	Financial assets at fair value through equity	Financial investments of insurance activities	Derivatives used for hedging purposes	Total			
645	4,372		1,152	6,169	100,665	4,555	105,220
				-	**(3,369)**	**(131)**	**(3,500)**
				-	722		722
				-	(863)		(863)
				-	38		38
				-	3	2	5
				-	(311)	(2)	(313)
				-	1	(1)	-
				-		493	493
(89)	10		1	(78)	175	104	279
				-	-	(8)	(8)
				-	(34)	23	(11)
(2,748)	(198)		(15)	(2,961)	(2,803)	(216)	(3,019)
				-	**7,759**	**448**	**8,207**
						(41)	(41)
(2,192)	4,184		1,138	3,130	101,983	5,226	107,209
	(1,947)	1,947		-	-		-
(2,192)	2,237	1,947	1,138	3,130	101,983	5,226	107,209
	(1,648)		(1)	(1,649)	(2,533)	(100)	(2,633)
					(24)		(24)
(2,192)	589	1,947	1,137	1,481	99,426	5,126	104,552
				-	**(3,772)**	**(160)**	**(3,932)**
				-	707	4	711
				-	(600)		(600)
				-	(208)		(208)
				-	2		2
				-	(356)	(2)	(358)
				-	6	(6)	-
				-	-	(1,299)	(1,299)
(29)	10			(19)	61	307	368
				-	(6)	(165)	(171)
				-	(8)	11	3
				-	-		-
(252)	(398)	(418)	(315)	(1,383)	(1,311)	(4)	(1,315)
				-	**7,526**	**479**	**8,005**
				-	-	(32)	(32)
(2,473)	201	1,529	822	79	101,467	4,259	105,726

NOTES TO THE FINANCIAL STATEMENTS

Prepared in accordance with IFRS as adopted by the European Union

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES APPLIED BY THE GROUP

1.a ACCOUNTING STANDARDS

1.a.1 APPLICABLE ACCOUNTING STANDARDS

The consolidated financial statements of the BNP Paribas Group have been prepared in accordance with international accounting standards (International Financial Reporting Standards – IFRS), as adopted for use in the European Union[1]. Accordingly, certain provisions of IAS 39 on hedge accounting have been excluded, and certain recent texts have not yet undergone the approval process.

Information on the nature and extent of risks relating to financial instruments as required by IFRS 7 "Financial Instruments: Disclosures" and to insurance contracts as required by IFRS 4 "Insurance Contracts", along with information on regulatory capital required by IAS 1 "Presentation of Financial Statements" are presented in Chapter 5 of the Registration document. This information, which is an integral part of the notes to the BNP Paribas Group's consolidated financial statements, is covered by the opinion of the Statutory Auditors concerning the consolidated financial statements, and is identified in the Annual Report by the word "Audited".

IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from contracts with customers"

Since 1 January 2018, the Group applies:

- IFRS 9 "Financial Instruments" and amendments to IFRS 9: "Prepayment Features with Negative Compensation" adopted by the European Union, on 22 November 2016 and on 22 March 2018 respectively.

  IFRS 9 replaces IAS 39 "Financial Instruments: Recognition and Measurement", related to the classification and measurement of financial instruments. It sets out the new principles for the classification and measurement of financial instruments (Phase 1), for impairment for credit risk on debt instruments measured at amortised cost or at fair value through shareholders' equity, loan commitments given, financial guarantee contracts, lease and trade receivables and contract assets (Phase 2), as well as for general hedge accounting; i.e. micro hedging (Phase 3).

  IFRS 9 has modified the provisions relating to the own credit risk of financial liabilities designated as at fair value through profit or loss (fair value option).

  As regards hedge accounting (micro-hedging), the Group has maintained the hedge accounting principles under IAS 39. Besides, IFRS 9 does not explicitly address the fair value hedge of the interest rate risk on a portfolio of financial assets or liabilities. The provisions of IAS 39 for these portfolio hedges, as adopted by the European Union, continue to apply.

[1] The full set of standards adopted for use in the European Union can be found on the website of the European Commission at: https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting_en

- The amendment to IFRS 4 "Insurance Contracts": "*Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts*" adopted by the European Union on 3 November 2017.

  This amendment provides the option for entities that predominantly undertake insurance activities to defer the effective date of IFRS 9 until 1 January 2021[2]. The effect of such a deferral is that those entities may continue to report their financial statements under the existing standard IAS 39.

  This temporary exemption from IFRS 9, which was limited to groups that predominantly undertook insurance activities according to the IASB amendment, has been extended to the insurance sector of financial conglomerates as defined by the Directive 2002/87/EC as adopted by the European Union. This exemption is subject to conditions, notably the absence of internal transfer of financial instruments, other than financial instruments that are measured at fair value through profit or loss, between insurance entities and other entities of the financial conglomerate.

  BNP Paribas Group applies this amendment as adopted by the European Union to all its insurance entities, including funds related to this activity, which will apply IAS 39 "Financial instruments: Recognition and Measurement" until 31 December 2020.

- IFRS 15 "Revenue from Contracts with Customers" adopted by the European Union on 22 September 2016.

IFRS 9 and IFRS 15 introduce the option not to restate the comparative figures for prior periods. Since the Group has retained this option, the comparative financial statements for 2017 have not been restated for these changes in method.

The introduction of standards and amendments which are mandatory as of 1 January 2018 did not have an effect on the 2018 financial statements.

The Group did not anticipate the application of the new standards, amendments, and interpretations adopted by the European Union, when the application in 2018 was optional, except for the amendment to IFRS 9 "*Prepayment Features with Negative Compensation*".

1.a.2 NEW MAJOR ACCOUNTING STANDARDS, PUBLISHED BUT NOT YET APPLICABLE

IFRS 16 Leases

IFRS 16 "Leases", issued in January 2016, will supersede IAS 17 "Leases" and the interpretations relating to the accounting of such contracts. The new definition of leases relies on both the identification of an asset and the control of the right to use the identified asset by the lessee.

From the lessor's point of view, the expected impact should be limited, as the requirements of IFRS 16 remain mostly unchanged from the current IAS 17.

For the lessee, IFRS 16 will require recognition in the balance sheet of all leases, in the form of a right-of-use on the leased asset presented under fixed assets, along with the recognition of a financial liability for the rent and other payments to be made over the leasing period. The right-of-use assets will be amortised on a straight-line basis and the financial liabilities will be amortised on an actuarial basis over the lease period. The main change induced by this new standard is related to contracts which, under IAS 17, met the definition of operating leases, and as such, did not require recognition in the balance sheet of the leased assets.

Adopted by the European Union on 31 October 2017, IFRS 16 will become mandatory for annual periods beginning on or after 1 January 2019.

For the first application of IFRS 16, the Group decided to apply the simplified retrospective transition requirements.

[2] At its 14 November 2018 Board meeting, the IASB decided to propose an amendment to IFRS 4 that would enable eligible insurance entities to defer the first application of IFRS 9 until 1 January 2022.

The discount rate applicable for the measurement of both the right-of-use and the lease liability is the incremental borrowing rate at the date of the initial application of IFRS 16, based on the residual maturity of the contract at that date.

Most of the lease contracts identified are property leases, and to a lesser extent computer and banking equipment leases and vehicles leases. Property leases encompass either commercial agencies from retail banking, or office buildings serving as head offices or operating offices in France or abroad.

The key hypotheses used by the Group for the measurement of rights-of-use and lease liabilities will be the following:

- The lease term will correspond to the non-cancellable period, together with periods covered by an extension option if the Group is reasonably certain to exercise this option. In France, the standard commercial lease contract is the so-called « three, six, nine » contract for which the maximum period of use is of 9 years, with a first non-cancellable period of 3 years followed by two optional extension periods of 3 years each.
- The discount rates used for measuring the right-of-use and the lease liability will be assessed for each contract, based on the incremental borrowing rate at the date of signature.

The Group will use both exemptions to the application of IFRS 16 requirements permitted by the standard, i.e. relating to leases whose term is shorter than or equal to 12 months, and to leases whose individual underlying asset value is below or equal to EUR 5,000 or USD 5,000 before tax.

The Group made the choice not to apply the exemption to the accounting of initial deferred tax assets (DTA) and deferred tax liabilities (DTL) permitted by paragraphs 15 and 24 of IAS 12 "Income Taxes". Consequently, distinct deferred tax assets and deferred tax liabilities will be accounted for with regards to the balance-sheet amounts of rights-of-use and lease liabilities of the lessee.

The main impacts expected from the application of IFRS 16 will be, on the balance-sheet:

- an increase of the fixed assets and the recognition of lease liabilities;
- an increase of deferred tax assets and deferred tax liabilities.

The main impact expected in the profit and loss account after the first application of the standard will be to replace rental expenses previously accounted for on a linear basis in operating expenses by additional interest expenses in Net Banking Income (NBI) in relation with lease liabilities, and to recognise additional amortizing expenses in relation with rights-of-use.

Following analysis performed on the standard, its principles and its interpretation, lease contracts have been inventoried and data collected in order to identify the impacts of the application of the new accounting model.

At this stage of the project, the estimation of the impacts of the first application of IFRS 16 is being finalized. The expected impact on the Group financial statements is not significant.

IFRS 17 Insurance Contracts

IFRS 17 "Insurance Contracts", issued in May 2017, will replace IFRS 4 "Insurance Contracts" and will become mandatory for annual periods beginning on or after 1 January 2021[3], after its adoption by the European Union for application in Europe.

The analysis of the standard and the identification of its effects continued in 2018.

[3] At its 14 November 2018 Board meeting, the IASB decided to propose an amendment to IFRS 17 that would defer the mandatory initial application of IFRS 17 until 1 January 2022.

1.b CONSOLIDATION

1.b.1 SCOPE OF CONSOLIDATION

The consolidated financial statements of BNP Paribas include entities that are controlled by the Group, jointly controlled, and under significant influence, with the exception of those entities whose consolidation is regarded as immaterial to the Group. Companies that hold shares in consolidated companies are also consolidated.

Subsidiaries are consolidated from the date on which the Group obtains effective control. Entities under temporary control are included in the consolidated financial statements until the date of disposal.

1.b.2 CONSOLIDATION METHODS

Exclusive control

Controlled enterprises are fully consolidated. The Group controls a subsidiary when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

For entities governed by voting rights, the Group generally controls the entity if it holds, directly or indirectly, the majority of the voting rights (and if there are no contractual provisions that alter the power of these voting rights) or if the power to direct the relevant activities of the entity is conferred on it by contractual agreements.

Structured entities are defined as entities that are not governed by voting rights, such as when those voting rights relate to administrative tasks only, whereas the relevant activities are directed by means of contractual arrangements. They often have the following features or attributes: restricted activities, a narrow and well-defined objective and insufficient equity to permit them to finance their activities without subordinated financial support.

For these entities, the analysis of control shall consider the purpose and design of the entity, the risks to which the entity is designed to be exposed and to what extent the Group absorbs the related variability. The assessment of control shall consider all facts and circumstances able to determine the Group's practical ability to make decisions that could significantly affect its returns, even if such decisions are contingent on uncertain future events or circumstances.

In assessing whether it has power, the Group considers only substantive rights which it holds or which are held by third parties. For a right to be substantive, the holder must have the practical ability to exercise that right when decisions about the relevant activities of the entity need to be made.

Control shall be reassessed if facts and circumstances indicate that there are changes to one or more of the elements of control.

Where the Group contractually holds the decision-making power, for instance where the Group acts as fund manager, it shall determine whether it is acting as agent or principal. Indeed, when associated with a certain level of exposure to the variability of returns, this decision-making power may indicate that the Group is acting on its own account and that it thus has control over those entities.

Minority interests are presented separately in the consolidated profit and loss account and balance sheet within consolidated equity. The calculation of minority interests takes into account the outstanding cumulative preferred shares classified as equity instruments issued by subsidiaries, when such shares are held outside the Group.

As regards fully consolidated funds, units held by third-party investors are recognised as debts at fair value through profit or loss, inasmuch as they are redeemable at fair value at the subscriber’s initiative.

For transactions resulting in a loss of control, any equity interest retained by the Group is remeasured at its fair value through profit or loss.

Joint control

Where the Group carries out an activity with one or more partners, sharing control by virtue of a contractual agreement which requires unanimous consent on relevant activities (those that significantly affect the entity's returns), the Group exercises joint control over the activity. Where the jointly controlled activity is structured through a separate vehicle in which the partners have rights to the net assets, this joint venture is accounted for using the equity method. Where the jointly controlled activity is not structured through a separate vehicle or where the partners have rights to the assets and obligations for the liabilities of the jointly controlled activity, the Group accounts for its share of the assets, liabilities, revenues and expenses in accordance with the applicable IFRSs.

Significant influence

Companies over which the Group exercises significant influence or associates are accounted for by the equity method. Significant influence is the power to participate in the financial and operating policy decisions of a company without exercising control. Significant influence is presumed to exist when the Group holds, directly or indirectly, 20% or more of the voting rights of a company. Interests of less than 20% can be included in consolidation scope if the Group effectively exercises significant influence. This is the case for example for entities developed in partnership with other associates, where the BNP Paribas Group participates in strategic decisions of the enterprise through representation on the Board of Directors or equivalent governing body, or exercises influence over the enterprise's operational management by supplying management systems or senior managers, or provides technical assistance to support the enterprise's development.

Changes in the net assets of associates (companies accounted for under the equity method) are recognised on the assets side of the balance sheet under "Investments in equity-method entities" and in the relevant component of shareholders' equity. Goodwill recorded on associates is also included under "Investments in equity-method entities".

Whenever there is an indication of impairment, the carrying amount of the investment consolidated under the equity method (including goodwill) is subjected to an impairment test, by comparing its recoverable value (the higher of value-in-use and market value less costs to sell) to its carrying amount. Where appropriate, impairment is recognised under "Share of earnings of equity-method entities" in the consolidated income statement and can be reversed at a later date.

If the Group's share of losses of an equity-method entity equals or exceeds the carrying amount of its investment in this entity, the Group discontinues including its share of further losses. The investment is reported at nil value. Additional losses of the equity-method entity are provided for only to the extent that the Group has contracted a legal or constructive obligation, or has made payments on behalf of this entity.

Where the Group holds an interest in an associate, directly or indirectly through an entity that is a venture capital organisation, a mutual fund, an open-ended investment company or similar entity such as an investment-related insurance fund, it may elect to measure that interest at fair value through profit or loss.

Realised gains and losses on investments in consolidated undertakings are recognised in the profit and loss account under "Net gain on non-current assets".

The consolidated financial statements are prepared using uniform accounting policies for similar transactions and other events occurring in similar circumstances.

1.b.3 CONSOLIDATION RULES

- **Elimination of intragroup balances and transactions**

Intragroup balances arising from transactions between consolidated enterprises, and the transactions themselves (including income, expenses and dividends), are eliminated. Profits and losses arising from intragroup sales of assets are eliminated, except where there is an indication that the asset sold is impaired. Unrealised gains and losses included in the value of financial instruments at fair value through equity and available-for-sale assets are maintained in the consolidated financial statements.

- **Translation of accounts expressed in foreign currencies**

The consolidated financial statements of BNP Paribas are prepared in euros.

The financial statements of enterprises whose functional currency is not the euro are translated using the closing rate method. Under this method, all assets and liabilities, both monetary and non-monetary, are translated using the spot exchange rate at the balance sheet date. Income and expense items are translated at the average rate for the period.

The same method is applied to the financial statements of enterprises located in hyperinflationary economies, after adjusting for the effects of inflation by applying a general price index.

Differences arising from the translation of balance sheet items and profit and loss items are recorded in shareholders' equity under «Exchange differences», and in "Minority interests" for the portion attributable to outside investors. Under the optional treatment permitted by IFRS 1, the Group has reset to zero all translation differences, by booking all cumulative translation differences attributable to shareholders and to minority interests in the opening balance sheet at 1 January 2004 to retained earnings.

On liquidation or disposal of some or all of an interest held in a foreign enterprise located outside the euro zone, leading to a change in the nature of the investment (loss of control, loss of significant influence or loss of joint control without keeping a significant influence), the cumulative exchange difference at the date of liquidation or sale, determined according to the step method, is recognised in the profit and loss account.

Should the percentage of interest change without leading to a modification in the nature of the investment, the exchange difference is reallocated between the portion attributable to shareholders and that attributable to minority interests if the entity is fully consolidated; if the entity is consolidated under the equity method, it is recorded in profit or loss for the portion related to the interest sold.

1.b.4 BUSINESS COMBINATION AND MEASUREMENT OF GOODWILL

- **Business combinations**

Business combinations are accounted for using the purchase method.

Under this method, the acquiree's identifiable assets and liabilities assumed are measured at fair value at the acquisition date except for non-current assets classified as assets held for sale which are accounted for at fair value less costs to sell.

The acquiree's contingent liabilities are not recognised in the consolidated balance sheet unless they represent a present obligation on the acquisition date and their fair value can be measured reliably.

The cost of a business combination is the fair value, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued to obtain control of the acquiree. Costs directly attributable to the business combination are treated as a separate transaction and recognised through profit or loss.

Any contingent consideration is included in the cost, as soon as control is obtained, at fair value on the date when control was acquired. Subsequent changes in the value of any contingent consideration recognised as a financial liability are recognised through profit or loss.

The Group may recognise any adjustments to the provisional accounting within 12 months of the acquisition date.

Goodwill represents the difference between the cost of the combination and the acquirer's interest in the net fair value of the identifiable assets and liabilities of the acquiree at the acquisition date. Positive goodwill is recognised in the acquirer's balance sheet, while negative goodwill is recognised immediately in profit or loss, on the acquisition date. Minority interests are measured at their share of the fair value of the acquiree's identifiable assets and liabilities. However, for each business combination, the Group can elect to measure minority interests at fair value, in which case a proportion of goodwill is allocated to them. To date, the Group has never used this latter option.

Goodwill is recognised in the functional currency of the acquiree and translated at the closing exchange rate.

On the acquisition date, any previously held equity interest in the acquiree is remeasured at its fair value through profit or loss. In the case of a step acquisition, the goodwill is therefore determined by reference to the acquisition-date fair value.

Since the revised IFRS 3 has been applied prospectively, business combinations completed prior to 1 January 2010 were not restated for the effects of changes to IFRS 3.

As permitted under IFRS 1, business combinations that took place before 1 January 2004 and were recorded in accordance with the previously applicable accounting standards (French GAAP), had not been restated in accordance with the principles of IFRS 3.

- **Measurement of goodwill**

The BNP Paribas Group tests goodwill for impairment on a regular basis.

- Cash-generating units

The BNP Paribas Group has split all its activities into cash-generating units[4] representing major business lines. This split is consistent with the Group's organisational structure and management methods, and reflects the independence of each unit in terms of results and management approach. It is reviewed on a regular basis in order to take account of events likely to affect the composition of cash-generating units, such as acquisitions, disposals and major reorganisations.

- Testing cash-generating units for impairment

Goodwill allocated to cash-generating units is tested for impairment annually and whenever there is an indication that a unit may be impaired, by comparing the carrying amount of the unit with its recoverable amount. If the recoverable amount is less than the carrying amount, an irreversible impairment loss is recognised, and the goodwill is written down by the excess of the carrying amount of the unit over its recoverable amount.

[4] As defined by IAS 36.

- Recoverable amount of a cash-generating unit

The recoverable amount of a cash-generating unit is the higher of the fair value of the unit less costs to sell, and its value in use.

Fair value is the price that would be obtained from selling the unit at the market conditions prevailing at the date of measurement, as determined mainly by reference to actual prices of recent transactions involving similar entities or on the basis of stock market multiples for comparable companies.

Value in use is based on an estimate of the future cash flows to be generated by the cash-generating unit, derived from the annual forecasts prepared by the unit's management and approved by Group Executive Management, and from analyses of changes in the relative positioning of the unit's activities on their market. These cash flows are discounted at a rate that reflects the return that investors would require from an investment in the business sector and region involved.

1.c TRANSLATION OF FOREIGN CURRENCY TRANSACTIONS

The methods used to account for assets and liabilities relating to foreign currency transactions entered into by the Group, and to measure the foreign exchange risk arising on such transactions, depend on whether the asset or liability in question is classified as a monetary or a non-monetary item.

- **Monetary assets and liabilities[5] expressed in foreign currencies**

Monetary assets and liabilities expressed in foreign currencies are translated into the functional currency of the relevant Group entity at the closing rate. Foreign exchange differences are recognised in the profit and loss account, except for those arising from financial instruments designated as a cash flow hedge or a net foreign investment hedge, which are recognised in shareholders' equity.

- **Non-monetary assets and liabilities expressed in foreign currencies**

Non-monetary assets may be measured either at historical cost or at fair value. Non-monetary assets expressed in foreign currencies are translated using the exchange rate at the date of the transaction if they are measured at historical cost, and at the closing rate if they are measured at fair value.

Foreign exchange differences relating to non-monetary assets denominated in foreign currencies and recognised at fair value (equity instruments) are recognised in profit or loss when the asset is classified in “Financial assets at fair value through profit or loss” and in equity when the asset is classified under “Financial assets at fair value through equity”.

[5] Monetary assets and liabilities are assets and liabilities to be received or paid in fixed or determinable amounts of cash.

1.d NET INTEREST INCOME, COMMISSIONS AND INCOME FROM OTHER ACTIVITIES

1.d.1 NET INTEREST INCOME

Income and expenses relating to debt instruments measured at amortised cost and at fair value through shareholders' equity are recognised in the income statement using the effective interest rate method.

The effective interest rate is the rate that ensures the discounted value of estimated future cash flows through the expected life of the financial instrument or, when appropriate, a shorter period, is equal to the gross carrying amount of the asset or liability in the balance sheet. The effective interest rate measurement takes into account all fees received or paid that are an integral part of the effective interest rate of the contract, transaction costs, and premiums and discounts.

Commissions considered as an additional component of interest are included in the effective interest rate, and are recognised in the profit and loss account in “Net interest income”. This category includes notably commissions on financing commitments when it is considered that the setting up of a loan is more likely than unlikely. Commissions received in respect of financing commitments are deferred until they are drawn and then included in the effective interest rate calculation and amortised over the life of the loan. Syndication commissions are also included in this category for the portion of the commission equivalent to the remuneration of other syndication participants.

1.d.2 COMMISSIONS AND INCOME FROM OTHER ACTIVITIES

Commissions received with regards to banking and similar services provided (except for those that are integral part of the effective interest rate), revenues from property development and revenues from services provided in connection with lease contracts fall within the scope of IFRS 15 ‘Revenue from Contracts with Customers.’

This standard defines a single model for recognising revenue based on five-step principles. These five steps enable to identify the distinct performance obligations included in the contracts and allocate the transaction price among them. The income related to those performance obligations is recognized as revenue when the latter are satisfied, namely when the control of the promised goods or services has been transferred.

The price of a service may contain a variable component. Variable amounts may be recognized in the income statement only if it is highly probable that the amounts recorded will not result in a significant downward adjustment.

Commission

The group records commission income and expenses in profit or loss:

- either over time as the service is rendered when the client receives continuous service. These include, for example, certain commissions on transactions with customers when services are rendered on a continuous basis, commissions on financing commitments that are not included in the interest margin, because the probability that they give rise to the drawing up of a loan is low, commissions on financial collateral, clearing commissions on financial instruments, commissions related to trust and similar activities, securities custody fees...

  Commissions received under financial guarantee commitments are deemed to represent the initial fair value of the commitment. The resulting liability is subsequently amortised over the term of the commitment, in Commission income.

- or at a point in time when the service is rendered, in other cases. These include, for example, distribution fees received, loan syndication fees remunerating the arrangement service, advisory fees...

Income from other activities

Income from property development as well as income from services provided in connection with lease contracts is recorded under 'income from other activities' in the income statement.

Regarding property development income, the group records it in profit or loss:

- over time, when the performance obligation creates or enhances an asset on which the customer obtains control as it is created or enhanced (e.g. work in progress controlled by the client on the land in which the asset is located...), or where the service performed does not create an asset that the entity could otherwise use and gives it enforceable right to payment for performance completed to date. This is the case for contracts such as VEFA (sale in the future state of completion) in France.
- at completion in other cases.

Regarding income from services provided in connection with lease contracts, the group records them in profit or loss as the service is rendered, i.e. in proportion to the costs incurred for maintenance contracts.

1.e FINANCIAL ASSETS AND LIABILITIES

Financial assets, except those relating to insurance activities (see note 1.f) are classified at amortised cost, at fair value through shareholders' equity or at fair value through profit or loss depending on the business model and the contractual features of the instruments at initial recognition.

Financial liabilities are classified at amortised cost or at fair value through profit or loss at initial recognition.

Financial assets and liabilities are recognised in the balance sheet when the group becomes a party to the contractual provisions of the instrument. Purchases and sales of financial assets made within a period established by the regulations or by a convention in the relevant marketplace are recognised in the balance sheet at the settlement date.

Accounting principles applicable to financial assets and liabilities for the financial statements as at 31 December 2017 are presented in the 2017 Registration document.

1.e.1 FINANCIAL ASSETS AT AMORTISED COST

Financial assets are classified at amortised cost if the following two criteria are met: the business model objective is to hold the instrument in order to collect the contractual cash flows and the cash flows consist solely of payments relating to principal and interest on the principal.

Business model criterion

Financial assets are managed within a business model whose objective is to hold financial assets in order to collect cash flows through the collection of contractual payments over the life of the instrument.

The realisation of disposals close to the maturity of the instrument and for an amount close to the remaining contractual cash-flows, or due to an increase in the counterparty's credit risk is consistent with a business model whose objective is to collect the contractual cash flows ("collect"). Sales imposed by regulatory requirements or to manage the concentration of credit risk (without an increase in the asset's credit risk) are also consistent with this business model when they are infrequent or insignificant in value.

Cash flow criterion

The cash flow criterion is satisfied if the contractual terms of the debt instrument give rise, on specified dates, to cash flows that are solely repayments of principal and interest on the principal amount outstanding.

The criterion is not met in the event of a contractual characteristic that exposes the holder to risks or to the volatility of contractual cash flows that are inconsistent with those of an non structured or 'basic lending' arrangement. It is also not satisfied in the event of leverage that increases the variability of the contractual cash flows.

Interests consist of consideration for the time value of money, for the credit risk, and for the remuneration of other risks (e.g. liquidity risk), costs (e.g. administration fees), and a profit margin consistent with that of a basic lending arrangement. The existence of negative interests does not call into question the cash flow criterion.

The time value of money is the component of interest - usually referred to as the 'rate' component - which provides consideration for only the passage of time. The relationship between the interest rate and the passage of time shall not be modified by specific characteristics that would likely call into question the respect of the cash flow criterion.

Thus, when the variable interest rate of the financial asset is periodically reset on a frequency that does not match the duration for which the interest rate is established, the time value of money may be considered as modified and, depending on the significance of that modification, the cash flow criterion may not be met. Some financial assets held by the Group present a mismatch between the interest rate reset frequency and the maturity of the index, or interest rates indexed on an average of benchmark rate. The Group has developed a consistent methodology for analysing this alteration of the time value of money.

Regulated rates meet the cash flow criterion when they provide a consideration that is broadly consistent with the passage of time and does not expose to risks or volatility in the contractual cash flows that would be inconsistent with those of a basic lending arrangement (example: loans granted in the context of Livret A savings accounts).

Some contractual clauses may change the timing or the amount of cash flows. Early redemption options do not call into question the cash flow criterion if the prepayment amount substantially represents the principal amount outstanding and the interest thereon, which may include a reasonable compensation for the early termination of the contract. For example, regarding loans to retail customers, the compensation limited to 6 months of interest or 3% of the capital outstanding is considered as reasonable. Actuarial penalties, corresponding to the discount value of the difference between the residual contractual cash-flows of the loan, and their reinvestment in a loan to a similar counterparty or in the interbank market for a similar residual maturity are also considered as reasonable, even when the compensation can be positive or negative (i.e. so called "symmetric" compensations). An option that permits the issuer or the holder of a financial instrument to change the interest rate from floating to fixed rate does not breach the cash flow criterion if the fixed rate is determined at origination, or if it represents the time value of money for the residual maturity of the instrument at the date of exercise of the option.

In the particular case of financial assets contractually linked to payments received on a portfolio of underlying assets and which include a priority order for payment of cash flows between investors ("tranches"), thereby creating concentrations of credit risk, a specific analysis is carried out. The contractual characteristics of the tranche and those of the underlying financial instruments portfolios must meet the cash flow criterion and the credit risk exposure of the tranche must be equal or lower than the exposure to credit risk of the underlying pool of financial instruments.

Certain loans may be "non-recourse", either contractually, or in substance when they are granted to a special purpose entity. That is in particular the case of several project financing or asset financing loans. The cash-flow criterion is met as long as these loans do not represent a direct exposure on the assets acting as collateral. In practice, the sole fact that the financial asset explicitly gives rise to cash-flows that are consistent with payments of principal and interest is not sufficient to conclude that the instrument meets the cash-flows criterion. In that case, the particular underlying assets to which there is limited recourse shall be analysed using the "look-through" approach. If those assets do not themselves meet the cash-flows criterion, an assessment of the existing credit enhancement has to be performed. The following aspects are considered: structuring and sizing of the transaction, own funds level of the structure, expected source of repayment, volatility of the underlying assets. This analysis is applied to "non-recourse" loans granted by the Group.

The “financial assets at amortised cost” category includes, in particular, loans granted by the Group, as well as, reverse repurchase agreements and securities held by the Group ALM Treasury in order to collect contractual flows and meeting the cash-flows criterion.

Recognition

On initial recognition, financial assets are recognised at their fair value, including transaction costs directly attributable to the transaction as well as commissions related to the origination of the loans.

They are subsequently measured at amortised cost, including accrued interest and net of repayments of principal and interest during the past period. These financial assets are also subject from initial recognition, to the measurement of a loss allowance for expected credit losses (note 1.e.5).

Interest is calculated using the effective interest method determined at inception of the contract.

1.e.2 FINANCIAL ASSETS AT FAIR VALUE THROUGH SHAREHOLDERS’ EQUITY

Debt instruments

Debt instruments are classified at fair value through shareholders’ equity if the following two criteria are met:

- Business model criterion: Financial assets are held in a business model whose objective is achieved by both holding the financial assets in order to collect contractual cash flows and selling the financial assets (“collect and sale”). The latter is not incidental but is an integral part of the business model.
- Cash flow criterion: The principles are identical to those applicable to financial assets at amortised cost.

The securities held by the Group ALM Treasury in order to collect contractual flows or to be sold and meeting the cash flow criterion are in particular classified in this category.

On initial recognition, financial assets are recognised at their fair value, including transaction costs directly attributable to the transaction. They are subsequently measured at fair value and changes in fair value are recognized, under a specific line of shareholders’ equity entitled “Changes in assets and liabilities recognized directly in equity”. These financial assets are also subject to the measurement of a loss allowance for expected credit losses on the same approach as for debt instruments at amortised cost. The counterparty of the related impact in cost of risk is recognized in the same specific line of shareholders’ equity. On disposal, changes in fair value previously recognised in shareholders’ equity are reclassified to profit or loss.

In addition, interest is recognised in the income statement using the effective interest method determined at the inception of the contract.

Equity instruments

Investments in equity instruments such as shares are classified on option, and on a case by case basis, at fair value through shareholders’ equity (under a specific line). On disposal of the shares, changes in fair value previously recognised in equity are not recognised in profit or loss. Only dividends, if they represent remuneration for the investment and not repayment of capital, are recognised in profit or loss. These instruments are not subject to impairment.

Investments in mutual funds puttable to the issuer do not meet the definition of equity instruments. They do not meet the cash flow criterion either, and thus are recognized at fair value through profit or loss.

1.e.3 Financing and guarantee commitments

Financing and financial guarantee commitments that are not recognised as derivative instruments at fair value through profit or loss are presented in the note relating to Financing and guarantee commitments. They are subject to the measurement of a loss allowance for expected credit losses. These loss allowances are presented under "provisions for contingencies and charges".

1.e.4 Regulated savings and loan contracts

Home savings accounts (*Comptes Épargne-Logement* – "CEL") and home savings plans *(Plans d'Épargne Logement* – "PEL") are government-regulated retail products sold in France. They combine a savings phase and a loan phase which are inseparable, with the loan phase contingent upon the savings phase.

These products contain two types of obligations for BNP Paribas: an obligation to pay interest on the savings for an indefinite period, at a rate set by the government at the inception of the contract (in the case of PEL products) or at a rate reset every six months using an indexation formula set by law (in the case of CEL products); and an obligation to lend to the customer (at the customer's option) an amount contingent upon the rights acquired during the savings phase, at a rate set at the inception of the contract (in the case of PEL products) or at a rate contingent upon the savings phase (in the case of CEL products).

The Group's future obligations with respect to each generation (in the case of PEL products, a generation comprises all products with the same interest rate at inception; in the case of CEL products, all such products constitute a single generation) are measured by discounting potential future earnings from at-risk outstandings for that generation.

At-risk outstandings are estimated on the basis of a historical analysis of customer behaviour, and are equivalent to:

- for the loan phase: statistically probable loans outstanding and actual loans outstanding;
- for the savings phase: the difference between statistically probable outstandings and minimum expected outstandings, with minimum expected outstandings being deemed equivalent to unconditional term deposits.

Earnings for future periods from the savings phase are estimated as the difference between the reinvestment rate and the fixed savings interest rate on at-risk savings outstanding for the period in question. Earnings for future periods from the loan phase are estimated as the difference between the refinancing rate and the fixed loan interest rate on at-risk loans outstanding for the period in question.

The reinvestment rate for savings and the refinancing rate for loans are derived from the swap yield curve and from the spreads expected on financial instruments of similar type and maturity. Spreads are determined on the basis of actual spreads on fixed rate home loans in the case of the loan phase and products offered to individual clients in the case of the savings phase. In order to reflect the uncertainty of future interest rate trends, and the impact of such trends on customer behaviour models and on at-risk outstandings, the obligations are estimated using the Monte-Carlo method.

Where the sum of the Group's estimated future obligations with respect to the savings and loan phases of any generation of contracts indicates a potentially unfavourable situation for the Group, a provision is recognised (with no offset between generations) in the balance sheet in "Provisions for contingencies and charges". Movements in this provision are recognised as interest income in the profit and loss account.

1.e.5 Impairment of financial assets measured at amortised cost and debt instruments measured at fair value through shareholders' equity

The impairment model for credit risk is based on expected losses.

This model applies to loans and debt instruments measured at amortised cost or fair value through equity, to loan commitments and financial guarantee contracts that are not recognised at fair value, as well as to lease receivables, trade receivables and contract assets.

General model

The group identifies three "stages" that correspond each to a specific status with regards to the evolution of counterparty credit risk since the initial recognition of the asset.

- 12-month expected credit losses ("stage 1"): If at the reporting date, the credit risk of the financial instrument has not increased significantly since its initial recognition, this instrument is impaired at an amount equal to 12-month expected credit losses (resulting from the risk of default within the next 12 months).
- Lifetime expected credit losses for non-impaired assets ("stage 2"): The loss allowance is measured at an amount equal to the lifetime expected credit losses if the credit risk of the financial instrument has increased significantly since initial recognition, but the financial asset is not considered credit-impaired or doubtful.
- Lifetime expected credit losses for credit-impaired or doubtful financial assets ("stage 3"): the loss allowance is also measured for an amount equal to the lifetime expected credit losses.

This general model is applied to all instruments within the scope of IFRS 9 impairment, except for purchased or originated credit-impaired financial assets and instruments for which a simplified model is used (see below).

The IFRS 9 expected credit loss approach is symmetrical, i.e. if lifetime expected credit losses have been recognised in a previous reporting period, and if it is assessed in the current reporting period that there is no longer any significant increase in credit risk since initial recognition, the loss allowance reverts to a 12-months expected credit loss.

Regarding interest income, under "stage" 1 and 2, it is calculated on the gross carrying amount. Under "stage 3", interest income is calculated on the amortised cost (i.e. the gross carrying amount adjusted for the loss allowance).

Definition of default

The definition of default is aligned with the Basel regulatory default definition, with a rebuttable presumption that the default occurs no later than 90 days past-due.

The definition of default is used consistently for assessing the increase in credit risk and measuring expected credit losses.

Doubtful credit-impaired financial assets

Definition

A financial asset is considered doubtful and classified in "stage 3" when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred.

At an individual level, objective evidence that a financial asset is credit-impaired includes observable data regarding the following events: the existence of accounts that are more than 90 days past due; knowledge or indications that the borrower meets significant financial difficulties, such that a risk can be considered to have arisen regardless of whether the borrower has missed any payments; concessions with respect to the credit terms granted to the borrower that the lender would not have considered had the borrower not been meeting financial difficulty (see section "Restructuring of financial assets for financial difficulties").

Specific cases of purchased or originated credit-impaired assets

In some cases, financial assets are credit-impaired at their initial recognition.

For these assets, there is no loss allowance accounted for at initial recognition. The effective interest rate is calculated taking into account the lifetime expected credit losses in the initial estimated cash flows. Any change in lifetime expected credit losses since initial recognition, positive or negative, is recognized as a loss allowance adjustment in profit or loss.

Simplified model

The simplified approach consists in accounting for a loss allowance corresponding to lifetime expected credit losses since initial recognition, and at each reporting date.

The group applies this model to trade receivables with a maturity shorter than 12 months.

Significant increase in credit risk

Significant increase in credit risk may be assessed on an individual basis or on a collective basis (by grouping financial instruments according to common credit risk characteristics) taking into account all reasonable and supportable information and comparing the risk of default of the financial instrument at the reporting date with the risk of default of the financial instrument at the date of initial recognition.

Assessment of deterioration is based on the comparison of the probabilities of default or the ratings on the date of initial recognition with those existing at the reporting date.

There is also, according to the standard, a rebuttable presumption that the credit risk of an instrument has significantly increased since initial recognition when the contractual payments are more than 30 days past due.

In consumer credit specialised business, a significant increase in credit risk is also considered when a past due event has occurred within the last 12 months, even if regularized since.

The principles applied to assess the significant increase in credit risk are detailed in note 3.h Cost of risk.

Measurement of expected credit losses

Expected credit losses are defined as an estimate of credit losses (i.e. the present value of all cash shortfalls) weighted by the probability of occurrence of these losses over the expected life of financial instrument. They are measured on an individual basis, for all exposures.

In practice, for exposures classified in stage 1 and stage 2, expected credit losses are measured as the product of the probability of default ("PD"), loss given default ("LGD") and exposure at default ("EAD"), discounted at the effective interest rate of the exposure (EIR). They result from the risk of default within the next 12 months (stage 1), or from the risk of default over the maturity of the facility (stage 2). In the consumer credit specialised business, because of the specificity of credit exposures, the methodology used is based on the probability of transition to term forfeiture, and on discounted loss rates after term forfeiture. The measurement of these parameters is performed on a statistical basis for homogeneous populations.

For exposures classified in stage 3, expected credit losses are measured as the value, discounted at the effective interest rate, of all cash shortfalls over the life of the financial instrument. Cash shortfalls represent the difference between the cash-flows that are due in accordance with the contract, and the cash-flows that are expected to be received.

The methodology developed is based on existing concepts and methods (in particular the Basel framework) on exposures for which capital requirement for credit risk is measured according to the IRBA methodology. This method is also applied to portfolios for which capital requirement for credit risk are measured according to the standardised approach. Besides, the Basel framework has been supplemented with the specific provisions of IFRS 9, in particular the use of forward-looking information.

Maturity

All contractual terms of the financial instrument (including prepayment, extension and similar options) over the life of the instrument are taken into account. In the rare cases where the expected life of the financial instrument cannot be estimated reliably, the residual contractual term must be used. The standard specifies that the maximum period to consider when measuring expected credit losses is the maximum contractual period. However, for revolving credit cards and overdrafts, in accordance with the exception provided by IFRS 9 for these products, the maturity considered for expected credit losses measurement is the period over which the entity is exposed to credit risk, which may extend beyond the contractual maturity (notice period). For revolving credits and overdrafts to non-retail counterparties, the contractual maturity can be taken, for example if the next review date is the contractual maturity as they are individually managed.

Probabilities of Default (PD)

The Probability of Default is an estimate of the likelihood of default over a given time horizon.

The measurement of expected credit losses requires the estimation of both 1-year probabilities of default and lifetime probabilities of default:

- 1-year PDs are derived from long term average regulatory "through the cycle" PDs to reflect the current situation ("point in time" or "PIT").
- Lifetime PDs are determined from the rating migration matrices reflecting the expected rating evolution of the exposure until maturity, and the associated probabilities of default.

Loss Given Default (LGD)

The Loss Given Default is the difference between the contractual cash-flows and the expected cash-flows, discounted using the effective interest rate (or an approximation thereof) at the default date. The LGD is expressed as a percentage of the EAD.

The estimate of expected cash flows takes into account cash flows resulting from the sale of collateral held or other credit enhancements if they are part of the contractual terms and are not accounted for separately by the entity (for example, a mortgage associated with a residential loan), net of the costs of obtaining and selling the collateral.

The LGD used for IFRS 9 purpose is derived from the Basel LGD parameter. It is retreated from downturn and conservatism margins (in particular regulatory margins), except margins for model uncertainties.

Exposure At Default (EAD)

The Exposure At Default (EAD) of an instrument is the anticipated outstanding amount owed by the obligor at the time of default. It is determined by the expected payment profile taking into account, depending on the product type: the contractual repayment schedule, expected early repayments and expected future drawings for revolving facilities.

Forward looking

The amount of expected credit losses is measured on the basis of probability-weighted scenarios, in view of past events, current conditions and reasonable and supportable economic forecasts.

The principles applied to take into account forward looking information when measuring expected credit losses are detailed in note 3.h Cost of risk.

Write-offs

A write-off consists in reducing the gross carrying amount of a financial asset when there is no longer reasonable expectations of recovering that financial asset in its entirety or a portion thereof, or when it has been fully or partially forgiven. The write-off is recorded when all other means available to the Bank for recovering the receivables or guarantees have failed, and also generally depends on the context specific to each jurisdiction.

If the amount of loss on write-off is greater than the accumulated loss allowance, the difference is an additional impairment loss posted in "cost of risk". For any receipt occurring when the financial asset (or part of it) is no longer recognised on the balance-sheet, the amount received is recorded as an impairment gain in "Cost of risk".

Recoveries through the repossession of the collateral

When a loan is secured by a financial or a non-financial asset serving as a guarantee and the counterparty is in default, the group may decide to exercise the guarantee and, according to the jurisdiction, it may then become owner of the asset. In such a situation, the loan is written-off in counterparty of the asset received as collateral.

Once ownership of the asset is carried out, it is accounted for at fair value and classified according to the intent of use.

Restructuring of financial assets for financial difficulties

A restructuring due to the borrower's financial difficulties is defined as a change in the terms and conditions of the initial transaction that the Group is considering only for economic or legal reasons related to the borrower's financial difficulties.

For restructurings not resulting in derecognition of the financial asset, the restructured asset is subject to an adjustment of its gross carrying amount, to reduce it to the discounted amount, at the original effective interest rate of the asset, of the new expected future flows. The change in the gross carrying amount of the asset is recorded in the income statement in “Cost of risk”.

The existence of a significant increase in credit risk for the financial instrument is then assessed by comparing the risk of default after the restructuring (under the revised contractual terms) and the risk of default at the initial recognition date (under the original contractual terms). In order to demonstrate that the criteria for recognising lifetime expected credit losses are no longer met, good quality payment behaviour will have to be observed over a certain period of time.

When the restructuring consists of a partial or total exchange against other substantially different assets (for example, the exchange of a debt instrument against an equity instrument), it results in the extinction of the original asset and the recognition of the assets remitted in exchange, measured at their fair value at the date of exchange. The difference in value is recorded in the income statement in “Cost of risk”.

Modifications of financial assets that are not due to the borrower’s financial difficulties (i.e. commercial renegotiations) are generally analysed as the early prepayment of the former financial asset, which is then derecognised, followed by the set-up of a new financial asset at market conditions.

1.e.6 COST OF RISK

Cost of risk includes the following items of income:

- Impairment gains and losses resulting from the accounting of loss allowances for 12-month expected credit losses and lifetime expected credit losses (‘stage 1’ and ‘stage 2’) relating to debt instruments measured at amortised cost or at fair value through shareholders' equity, loan commitments and financial guarantee contracts that are not recognised at fair value as well as lease receivables, contract assets and trade receivables;
- Impairment gains and losses resulting from the accounting of loss allowances relating to financial assets for which there is objective evidence of impairment (‘stage 3’), write-offs on irrecoverable loans and amounts recovered on loans written-off;
- Impairment gains and losses relating to fixed-income securities of insurance entities that are individually impaired (which fall under IAS 39).

It also includes expenses relating to fraud and to disputes inherent to the financing activity.

1.e.7 FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Trading portfolio and other financial assets measured at fair value through profit or loss

The trading portfolio includes instruments held for trading (trading transactions), including derivatives.

Other financial assets measured at fair value through profit or loss include debt instruments that do not meet the “collect” or “collect and sale” business model criterion or that do not meet the cash-flow criterion, as well as equity instruments for which the fair value through shareholders’ equity option has not been retained.

All those financial instruments are measured at fair value at initial recognition, with transaction costs directly posted in profit or loss. At reporting date, they are measured at fair value, with changes presented in “Net gain/loss on financial instruments at fair value through profit or loss”. Income, dividends, and realised gains and losses on disposal related to held for trading transactions are accounted for in the same profit or loss account.

Financial liabilities measured at fair value through profit or loss

Financial liabilities are recognised under option in this category in the two following situations:

- for hybrid financial instruments containing one or more embedded derivatives which otherwise would have been separated and accounted for separately. An embedded derivative is such that its economic characteristics and risks are not closely related to those of the host contract;
- when using the option enables the entity to eliminate or significantly reduce a mismatch in the measurement and accounting treatment of assets and liabilities that would otherwise arise if they were to be classified in separate categories.

Changes in fair value due to the own credit risk are recognised under a specific heading of shareholders’ equity.

1.e.8 FINANCIAL LIABILITIES AND EQUITY INSTRUMENTS

A financial instrument issued or its various components are classified as a financial liability or equity instrument, in accordance with the economic substance of the legal contract.

Financial instruments issued by the Group are qualified as debt instruments if the entity in the Group issuing the instruments has a contractual obligation to deliver cash or another financial asset to the holder of the instrument. The same applies if the Group is required to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the Group, or to deliver a variable number of the Group’s own equity instruments.

Equity instruments result from contracts evidencing a residual interest in an entity's assets after deducting all of its liabilities.

Debt securities and subordinated debt

Debt securities and subordinated debt are measured at amortised cost unless they are recognised at fair value through profit or loss.

Debt securities are initially recognised at the issue value including transaction costs, and are subsequently measured at amortised cost using the effective interest method.

Bonds redeemable or convertible into own equity are hybrid instruments that may contain a debt component and an equity component, determined upon initial recognition of the transaction.

Equity instruments

The term “own equity instruments” refers to shares issued by the parent company (BNP Paribas SA) and by its fully consolidated subsidiaries. External costs that are directly attributable to an issue of new shares are deducted from equity net of all related taxes.

Own equity instruments held by the Group, also known as treasury shares, are deducted from consolidated shareholders’ equity irrespective of the purpose for which they are held. Gains and losses arising on such instruments are eliminated from the consolidated profit and loss account.

When the Group acquires equity instruments issued by subsidiaries under the exclusive control of BNP Paribas, the difference between the acquisition price and the share of net assets acquired is recorded in retained earnings attributable to BNP Paribas shareholders. Similarly, the liability corresponding to put options granted to minority shareholders in such subsidiaries, and changes in the value of that liability, are offset against minority interests, with any surplus offset against retained earnings attributable to BNP Paribas shareholders. Until these options have been exercised, the portion of net income attributable to minority interests is allocated to minority interests in the profit and loss account. A decrease in the Group’s interest in a fully consolidated subsidiary is recognised in the Group's accounts as a change in shareholders' equity.

Financial instruments issued by the group and classified as equity instruments (e.g. Perpetual Super Subordinated Notes) are presented in the balance sheet in “capital and retained earnings”.

Distributions from a financial instrument classified as an equity instrument are recognised directly as a deduction from equity. Similarly, the transaction costs of an instrument classified as equity are recognised as a deduction from shareholders’ equity.

Own equity instrument derivatives are treated as follows, depending on the method of settlement:

- as equity instruments if they are settled by physical delivery of a fixed number of own equity instruments for a fixed amount of cash or other financial asset. Such instruments are not revalued;
- as derivatives if they are settled in cash or by choice by physical delivery of the shares or in cash. Changes in value of such instruments are taken to the profit and loss account.

If the contract includes an obligation, whether contingent or not, for the bank to repurchase its own shares, the bank recognises the debt at its present value with an offsetting entry in shareholders’ equity.

1.e.9 HEDGE ACCOUNTING

The group retained the option provided by the standard to maintain the hedge accounting requirements of IAS 39 until the future standard on macro-hedging is entered into force. Furthermore, IFRS 9 does not explicitly address the fair value hedge of the interest rate risk on a portfolio of financial assets or liabilities. The provisions in IAS 39 for these portfolio hedges, as adopted by the European Union, continue to apply.

Derivatives contracted as part of a hedging relationship are designated according to the purpose of the hedge.

Fair value hedges are particularly used to hedge interest rate risk on fixed rate assets and liabilities, both for identified financial instruments (securities, debt issues, loans, borrowings) and for portfolios of financial instruments (in particular, demand deposits and fixed rate loans).

Cash flow hedges are particularly used to hedge interest rate risk on floating-rate assets and liabilities, including rollovers, and foreign exchange risks on highly probable forecast foreign currency revenues.

At the inception of the hedge, the Group prepares formal documentation which details the hedging relationship, identifying the instrument, or portion of the instrument, or portion of risk that is being hedged, the hedging strategy and the type of risk hedged, the hedging instrument, and the methods used to assess the effectiveness of the hedging relationship.

On inception and at least quarterly, the Group assesses, in consistency with the original documentation, the actual (retrospective) and expected (prospective) effectiveness of the hedging relationship. Retrospective effectiveness tests are designed to assess whether the ratio of actual changes in the fair value or cash flows of the hedging instrument to those in the hedged item is within a range of 80% to 125%. Prospective effectiveness tests are designed to ensure that expected changes in the fair value or cash flows of the derivative over the residual life of the hedge adequately offset those of the hedged item. For highly probable forecast transactions, effectiveness is assessed largely on the basis of historical data for similar transactions.

Under IAS 39 as adopted by the European Union, which excludes certain provisions on portfolio hedging, interest rate risk hedging relationships based on portfolios of assets or liabilities qualify for fair value hedge accounting as follows:

- the risk designated as being hedged is the interest rate risk associated with the interbank rate component of interest rates on commercial banking transactions (loans to customers, savings accounts and demand deposits);
- the instruments designated as being hedged correspond, for each maturity band, to a portion of the interest rate gap associated with the hedged underlying;
- the hedging instruments used consist exclusively of “plain vanilla” swaps;
- prospective hedge effectiveness is established by the fact that all derivatives must, on inception, have the effect of reducing interest rate risk in the portfolio of hedged underlying. Retrospectively, a hedge will be disqualified from hedge accounting once a shortfall arises in the underlying specifically associated with that hedge for each maturity band (due to prepayment of loans or withdrawals of deposits).

The accounting treatment of derivatives and hedged items depends on the hedging strategy.

In a fair value hedging relationship, the derivative instrument is remeasured at fair value in the balance sheet, with changes in fair value recognised in profit or loss in “Net gain/loss on financial instruments at fair value through profit or loss”, symmetrically with the remeasurement of the hedged item to reflect the hedged risk. In the balance sheet, the fair value remeasurement of the hedged component is recognised in accordance with the classification of the hedged item in the case of a hedge of identified assets and liabilities, or under “Remeasurement adjustment on interest rate risk hedged portfolios” in the case of a portfolio hedging relationship.

If a hedging relationship ceases or no longer fulfils the effectiveness criteria, the hedging instrument is transferred to the trading book and accounted for using the treatment applied to this category. In the case of identified fixed-income instruments, the remeasurement adjustment recognised in the balance sheet is amortised at the effective interest rate over the remaining life of the instrument. In the case of interest rate risk hedged fixed-income portfolios, the adjustment is amortised on a straight-line basis over the remainder of the original term of the hedge. If the hedged item no longer appears in the balance sheet, in particular due to prepayments, the adjustment is taken to the profit and loss account immediately.

In a cash flow hedging relationship, the derivative is measured at fair value in the balance sheet, with changes in fair value taken to shareholders’ equity on a separate line, “Changes in fair value recognised directly in equity”. The amounts taken to shareholders’ equity over the life of the hedge are transferred to the profit and loss account under “Net interest income” as and when the cash flows from the hedged item impact profit or loss. The hedged items continue to be accounted for using the treatment specific to the category to which they belong.

If the hedging relationship ceases or no longer fulfils the effectiveness criteria, the cumulative amounts recognised in shareholders’ equity as a result of the remeasurement of the hedging instrument remain in equity until the hedged transaction itself impacts profit or loss, or until it becomes clear that the transaction will not occur, at which point they are transferred to the profit and loss account.

If the hedged item ceases to exist, the cumulative amounts recognised in shareholders’ equity are immediately taken to the profit and loss account.

Whatever the hedging strategy used, any ineffective portion of the hedge is recognised in the profit and loss account under “Net gain/loss on financial instruments at fair value through profit or loss”.

Hedges of net foreign currency investments in subsidiaries and branches are accounted for in the same way as cash flow hedges. Hedging instruments may be currency derivatives or any other non-derivative financial instrument.

1.e.10 DETERMINATION OF FAIR VALUE

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market or most advantageous market, at the measurement date.

The Group determines the fair value of financial instruments either by using prices obtained directly from external data or by using valuation techniques. These valuation techniques are primarily market and income approaches encompassing generally accepted models (e.g. discounted cash flows, Black-Scholes model, and interpolation techniques). They maximize the use of observable inputs and minimize the use of unobservable inputs. They are calibrated to reflect current market conditions and valuation adjustments are applied as appropriate, when some factors such as model, liquidity and credit risks are not captured by the models or their underlying inputs but are nevertheless considered by market participants when setting the exit price.

The unit of measurement is generally the individual financial asset or financial liability but a portfolio-based measurement can be elected, subject to certain conditions. Accordingly, the Group retains this portfolio-based measurement exception to determine the fair value when some group of financial assets and financial liabilities and other contracts within the scope of the standard relating to financial instruments with substantially similar and offsetting market risks or credit risks are managed on the basis of a net exposure, in accordance with the documented risk management strategy.

Assets and liabilities measured or disclosed at fair value are categorised into the three following levels of the fair value hierarchy:

- Level 1: fair values are determined using directly quoted prices in active markets for identical assets and liabilities. Characteristics of an active market include the existence of a sufficient frequency and volume of activity and of readily available prices.
- Level 2: fair values are determined based on valuation techniques for which significant inputs are observable market data, either directly or indirectly. These techniques are regularly calibrated and the inputs are corroborated with information from active markets.
- Level 3: fair values are determined using valuation techniques for which significant inputs are unobservable or cannot be corroborated by market-based observations, due for instance to illiquidity of the instrument and significant model risk. An unobservable input is a parameter for which there are no market data available and that is therefore derived from proprietary assumptions about what other market participants would consider when assessing fair value. The assessment of whether a product is illiquid or subject to significant model risks is a matter of judgment.

The level in the fair value hierarchy within which the asset or liability is categorised in its entirety is based upon the lowest level input that is significant to the entire fair value.

For financial instruments disclosed in Level 3 of the fair value hierarchy, a difference between the transaction price and the fair value may arise at initial recognition. This “Day One Profit” is deferred and released to the profit and loss account over the period during which the valuation parameters are expected to remain non-observable. When parameters that were originally non-observable become observable, or when the valuation can be substantiated in comparison with recent similar transactions in an active market, the unrecognised portion of the day one profit is released to the profit and loss account.

1.e.11 DERECOGNITION OF FINANCIAL ASSETS AND FINANCIAL LIABILITIES

Derecognition of financial assets

The Group derecognises all or part of a financial asset either when the contractual rights to the cash flows from the asset expire or when the Group transfers the contractual rights to the cash flows from the asset and substantially all the risks and rewards of ownership of the asset. Unless these conditions are fulfilled, the Group retains the asset in its balance sheet and recognises a liability for the obligation created as a result of the transfer of the asset.

Derecognition of financial liabilities

The Group derecognises all or part of a financial liability when the liability is extinguished in full or in part.

Repurchase agreements and securities lending/borrowing

Securities temporarily sold under repurchase agreements continue to be recognised in the Group's balance sheet in the category of securities to which they belong. The corresponding liability is recognised at amortised cost under the appropriate "Financial liabilities at amortised cost" category on the balance sheet, except in the case of repurchase agreements contracted for trading purposes, for which the corresponding liability is recognised in "Financial liabilities at fair value through profit or loss".

Securities temporarily acquired under reverse repurchase agreements are not recognised in the Group's balance sheet. The corresponding receivable is recognised at amortised cost under the appropriate "Financial assets at amortised cost" category in the balance sheet, except in the case of reverse repurchase agreements contracted for trading purposes, for which the corresponding receivable is recognised in "Financial assets at fair value through profit or loss".

Securities lending transactions do not result in derecognition of the lent securities, and securities borrowing transactions do not result in recognition of the borrowed securities on the balance sheet. In cases where the borrowed securities are subsequently sold by the Group, the obligation to deliver the borrowed securities on maturity is recognised on the balance sheet under "financial liabilities at fair value through profit or loss".

1.e.12 OFFSETTING FINANCIAL ASSETS AND FINANCIAL LIABILITIES

A financial asset and a financial liability are offset and the net amount presented in the balance sheet if, and only if, the Group has a legally enforceable right to set off the recognised amounts, and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Repurchase agreements and derivatives that meet the two criteria set out in the accounting standard are offset in the balance sheet.

1.f ACCOUNTING STANDARDS SPECIFIC TO INSURANCE ACTIVITIES

The specific accounting policies relating to assets and liabilities generated by insurance contracts and financial contracts with a discretionary participation feature written by fully consolidated insurance companies are retained for the purposes of the consolidated financial statements. These policies comply with IFRS 4.

Financial assets and liabilities of insurance entities fall under IAS 39, as explained in note 1.a.1.

All other insurance company assets and liabilities are accounted for using the policies applied to the Group’s assets and liabilities generally, and are included in the relevant balance sheet and profit and loss account headings in the consolidated financial statements.

1.f.1 PROFIT AND LOSS ACCOUNT

Income and expenses recognised under insurance contracts issued by the group are presented in the income statement under “Net income from insurance activities”.

This heading in the income statement includes gross premiums written, net gain in investment contracts with no discretionary participation feature, net investment income (including income on investment property and impairments on shares and other equity instruments’), technical changes related to contracts; (including commissions), net charges for ceded reinsurance and technical external expenses.

Other income and expenses relating to insurance activities (i.e. recorded by insurance entities) are presented in the other statement headings according to their nature.

1.f.2 FINANCIAL INVESTMENTS OF INSURANCE ACTIVITIES

Investments of insurance activities mainly include:

- Investments by insurance entities in financial instruments that are recognised in accordance with the principles of IAS 39, which include investments representing technical reserves of insurance activities and notably unit-linked contracts
- Derivative instruments with a positive fair value. Group insurance entities underwrite derivative instruments for hedging purposes.
- Investment properties
- Equity method investments
- And reinsurers' share in liabilities arising from insurance and investment contracts.

Investments in financial instruments

Financial investments held by the group's insurance entities are classified in one of the four categories provided for in IAS 39: Financial assets at fair value through profit or loss, held-to-maturity financial assets, loans and receivables and available-for-sale financial assets.

- Financial assets at fair value through profit or loss

The category of ‘Financial assets at fair value through profit or loss’ includes derivatives and financial assets that the Group has elected to recognise and measure at fair value through profit or loss at inception, in accordance with the option offered by IAS 39.

Financial assets may be designated at fair value through profit or loss in the following cases (in accordance with IAS 39):

- hybrid financial instruments containing one or more embedded derivatives which otherwise would have been separated and accounted for separately. An embedded derivative is such that its economic characteristics and risks are not closely related to those of the host contract;
- where using the option enables the entity to eliminate or significantly reduce a mismatch in the measurement and accounting treatment of assets and liabilities that would arise if they were to be classified in separate accounting categories;
- when the group of financial assets and/or financial liabilities is managed and measured on the basis of fair value, in accordance with a documented risk management and investment strategy.

Investments held in respect of insurance or investment contracts where the financial risk is borne by policyholders (unit-linked contracts) are recognised at fair value through profit or loss.

When the Group measures at fair value through profit or loss investments made in respect of its insurance activities in entities over which it exercises significant influence or joint control, these investments are presented under the line "Financial assets at fair value through profit or loss" (cf. §1.b.2).

Financial instruments classified in this category are initially recognised at their fair value, with transaction costs being directly recognised in the income statement.
At the closing date, they are valued at their fair value.
Changes in value compared to the last valuation, income, dividends and realised gains and losses are presented under "Net income from insurance activities" and under "Income on financial instruments at fair value through profit or loss".

- Loans and advances

Fixed or determinable -income securities, which are not quoted in an active market, other than those for which the holder may not recover substantially all of its initial investment for reasons other than credit deterioration, are classified as "Loans and receivables" when they do not meet the conditions for classification as financial assets at fair value through profit or loss.

Loans and receivables are initially recognised at their fair value or equivalent, which generally corresponds to the net amount originally paid.
Loans and receivables are subsequently measured at amortised cost using the effective interest method and net of repayments of principal and interest.
Interest is calculated using the effective interest method, which includes interest, transaction costs and commissions included in their initial value and is presented under "Net income from insurance activities" and under sub-heading "Net gain on financial instruments at amortised cost".

Impairment losses recognised when there is objective evidence of impairment related to an event subsequent to the acquisition of the asset are presented under "Cost of risk".

- Held-to-maturity financial assets

"Held-to-maturity financial assets" include debt securities, with fixed maturity, that the Group has the intention and ability to hold until maturity.

Securities classified in this category are recognised at amortised cost using the effective interest method.

Income received on these securities is presented under "Net income from insurance activities" and under sub-heading "Net gain on financial instruments at amortised cost". Impairment losses recognised when there is objective evidence of impairment related to an event subsequent to the acquisition of the asset are presented under "Cost of risk".

- Available-for-sale financial assets

The category "Available-for-sale financial assets" includes debt or equity securities that do not fall within the previous three categories.

Assets included in the available-for-sale category are initially recorded at fair value, plus transaction costs where material. At the end of the reporting period, they are valued at their fair value and the changes in the latter, excluding accrued income, are presented under a specific heading of equity. On disposal of the securities, these unrealised gains or losses previously recognised in equity are reclassified in the income statement under the heading "Net income from insurance activities".

Income recognised using the effective interest method on debt securities, dividends received and impairments (in the event of a significant or lasting decline in the value of the securities) of equity securities are presented under "Net income from insurance activities" and under section "Net gain on available-for-sale financial assets". Impairment losses on debt securities are presented under "Cost of risk".

Investment property

Investment property corresponds to buildings held directly by insurance companies and property companies controlled.

Investment property, except for those used for unit-linked contracts, is recognised at cost and follows the accounting methods of the assets described elsewhere.

Investment property, held in respect of unit-linked contracts, is valued at fair value at fair value or equivalent, with changes in the income statement recognised in the income statement.

Equity-method investments

Investments in entities or real estate funds over which the Group exercises significant influence or joint control and for which the equity method is applied are recognised in the line "Equity method investments".

1.f.3 TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES

The item "Technical reserves and other insurance liabilities" includes:

- Commitments to policyholders and beneficiaries of contracts, which include technical reserves for insurance contracts subject to significant insurance hazard (mortality, longevity, disability, incapacity...) and technical liabilities of investment contracts with a discretionary profit-sharing feature, falling within IFRS 4. The discretionary participation clause grants life insurance policyholders the right to receive, in addition to the guaranteed remuneration, a share of the financial results achieved;
- Other insurance liabilities related to unit-linked contracts that fall within the scope of IAS 39 (i.e. investment contracts with no discretionary participating features);
- Deferred profit-sharing;
- Liabilities arising from insurance and reinsurance operations, including liabilities to policyholders;
- Financial derivative instruments of insurance activities carried at fair value through profit or loss, the fair value of which is negative. Group insurance entities underwrite derivative instruments for hedging purposes.

Financial liabilities that are not insurance liabilities (e.g. subordinated debt) fall under IAS 39. They are presented in "Financial Liabilities at amortised cost".

Insurance and reinsurance contracts and investment contracts with discretionary participating features

Life insurance guarantees cover mainly death risk (term life insurance, annuities, repayment of loans or guaranteed minimum on unit-linked contracts) and, regarding borrowers' insurance, to disability, incapacity and unemployment risks.

For life insurance, technical reserves consist mainly of mathematical reserves that corresponds as a minimum, to the surrender value of contracts and surplus reserve.

The policyholders' surplus reserve also includes amounts resulting from the application of shadow accounting representing the interest of policyholders, mainly within French life insurance subsidiaries, in unrealised gains and losses on assets where the benefit paid under the policy is linked to the return on those assets. This interest is an average derived from stochastic analyses of unrealised gains and losses attributable to policyholders in various scenarios.

A capitalisation reserve is set up in individual statutory accounts of French life-insurance companies on the sale of amortisable securities in order to defer part of the net realised gain and hence maintain the yield to maturity on the portfolio of admissible assets. In the consolidated financial statements, this reserve is reclassified into "Policyholders' surplus" on the liabilities side of the consolidated balance sheet, to the extent that it is highly probable it will be used.

Non-life technical reserves consist of unearned premium reserves (corresponding to the portion of written premiums relating to future periods) and outstanding claims reserves, inclusive of claims handling costs.

At the reporting date, a liability adequacy test is performed: The level of technical reserves (net of acquisition costs outstanding) is compared to the average value of cash flows resulting from stochastic calculations. Related adjustment to technical reserves, if any, is taken to the profit and loss account for the period.

In the event of an unrealised loss on shadow accounted assets, a policyholders' loss reserve is recognised on the assets side of the consolidated balance sheet in an amount equal to the probable deduction from the policyholders' future profit share. The recoverability of the policyholders' loss reserve is assessed prospectively, taking into account policyholders' surplus reserves recognised elsewhere, capital gains on financial assets that are not shadow accounted due to accounting elections made (held-to-maturity financial assets and property investments measured at cost) and the company's ability and intention to hold the assets carrying the unrealised loss. The policyholders' loss reserve is recognised symmetrically with the corresponding assets and shown on the assets side of the balance sheet under the line item "Accrued income and other assets".

Investment contracts with no discretionary participating features

Investment contracts with no discretionary participating features correspond mainly to unit-linked contracts that do not meet the definition of insurance and investment contracts with discretionary participating features.

Liabilities arising from unit-linked contracts are measured by reference to the fair value of the assets backing these contracts at the closing date.

1.g PROPERTY, PLANT, EQUIPMENT, AND INTANGIBLE ASSETS

Property, plant and equipment and intangible assets shown in the consolidated balance sheet are composed of assets used in operations and investment property.

Assets used in operations are those used in the provision of services or for administrative purposes, and include non-property assets leased by the Group as lessor under operating leases.

Investment property comprises property assets held to generate rental income and capital gains.

Investment property is recognised at cost, with the exception of those representing insurance or investment contracts whose risk is borne by policyholders (unit-linked contracts), which are measured at fair value through profit or loss and presented in the balance sheet under "Financial investments of insurance activities" (note 1.f.2).

Property, plant and equipment and intangible assets are initially recognised at purchase price plus directly attributable costs, together with borrowing costs where a long period of construction or adaptation is required before the asset can be brought into service.

Software developed internally by the BNP Paribas Group that fulfils the criteria for capitalisation is capitalised at direct development cost, which includes external costs and the labour costs of employees directly attributable to the project.

Subsequent to initial recognition, property, plant and equipment and intangible assets are measured at cost less accumulated depreciation or amortisation and any impairment losses.

The depreciable amount of property, plant and equipment and intangible assets is calculated after deducting the residual value of the asset. Only assets leased by the Group as the lessor under operating leases are presumed to have a residual value, as the useful life of property, plant and equipment and intangible assets used in operations is generally the same as their economic life.

Property, plant and equipment and intangible assets are depreciated or amortised using the straight-line method over the useful life of the asset. Depreciation and amortisation expense is recognised in the profit and loss account under "Depreciation, amortisation and impairment of property, plant and equipment and intangible assets".

Where an asset consists of a number of components which may require replacement at regular intervals, or which have different uses or generate economic benefits at different rates, each component is recognised separately and depreciated using a method appropriate to that component. The BNP Paribas Group has adopted the component-based approach for property used in operations and for investment property.

The depreciation periods used for office property are as follows: 80 years or 60 years for the shell (for prime and other property respectively); 30 years for facades; 20 years for general and technical installations; and 10 years for fixtures and fittings.

Software is amortised, depending on its type, over periods of no more than 8 years in the case of infrastructure developments and 3 years or 5 years in the case of software developed primarily for the purpose of providing services to customers.

Software maintenance costs are expensed as incurred. However, expenditure that is regarded as upgrading the software or extending its useful life is included in the initial acquisition or production cost.

Depreciable property, plant and equipment and intangible assets are tested for impairment if there is an indication of potential impairment at the balance sheet date. Non-depreciable assets are tested for impairment at least annually, using the same method as for goodwill allocated to cash-generating units.

If there is an indication of impairment, the new recoverable amount of the asset is compared with the carrying amount. If the asset is found to be impaired, an impairment loss is recognised in the profit and loss account. This loss is reversed in the event of a change in the estimated recoverable amount or if there is no longer an indication of impairment. Impairment losses are taken to the profit and loss account in "Depreciation, amortisation and impairment of property, plant and equipment and intangible assets".

Gains and losses on disposals of property, plant and equipment and intangible assets used in operations are recognised in the profit and loss account in “Net gain on non-current assets”.

Gains and losses on disposals of investment property are recognised in the profit and loss account in “Income from other activities” or “Expense on other activities”.

1.h LEASES

Group companies may either be the lessee or the lessor in a lease agreement.

1.h.1 GROUP COMPANY AS LESSOR

Leases contracted by the Group as lessor are categorised as either finance leases or operating leases.

- **Finance leases**

In a finance lease, the lessor transfers substantially all the risks and rewards of ownership of an asset to the lessee. It is treated as a loan made to the lessee to finance the purchase of the asset.

The present value of the lease payments, plus any residual value, is recognised as a receivable. The net income earned from the lease by the lessor is equal to the amount of interest on the loan, and is taken to the profit and loss account under “Interest income”. The lease payments are spread over the lease term, and are allocated to reduction of the principal and to interest such that the net income reflects a constant rate of return on the net investment outstanding in the lease. The rate of interest used is the rate implicit in the lease.

Impairments of lease receivables are determined using the same principles as applied to financial assets measured at amortised cost.

- **Operating leases**

An operating lease is a lease under which substantially all the risks and rewards of ownership of an asset are not transferred to the lessee.

The asset is recognised under property, plant and equipment in the lessor’s balance sheet and depreciated on a straight-line basis over its useful life. The depreciable amount excludes the residual value of the asset. The lease payments are taken to the profit and loss account in full on a straight-line basis over the lease term. Lease payments and depreciation expenses are taken to the profit and loss account under “Income from other activities” and “Expense on other activities”.

1.h.2 GROUP COMPANY AS LESSEE

Leases contracted by the Group as lessee are categorised as either finance leases or operating leases.

- **Finance leases**

A finance lease is treated as an acquisition of an asset by the lessee, financed by a loan. The leased asset is recognised in the balance sheet of the lessee at the lower of its fair value or the present value of the minimum lease payments calculated at the interest rate implicit in the lease. A matching liability, equal to the fair value of the leased asset or the present value of the minimum lease payments, is also recognised in the balance sheet of the lessee. The asset is depreciated using the same method as that applied to owned assets, after deducting the residual value from the amount initially recognised, over the useful life of the asset. If there is no reasonable certainty that the lessee will obtain ownership by the end of the lease term, the asset shall be fully depreciated over the shorter of the lease term and its useful life. The lease obligation is accounted for at amortised cost.

- **Operating leases**

The asset is not recognised in the balance sheet of the lessee. Lease payments made under operating leases are taken to the profit and loss account of the lessee on a straight-line basis over the lease term.

1.i NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

Where the Group decides to sell non-current assets or a group of assets and liabilities and it is highly probable that the sale will occur within 12 months, these assets are shown separately in the balance sheet, on the line "Non-current assets held for sale". Any liabilities associated with these assets are also shown separately in the balance sheet, on the line "Liabilities associated with non-current assets held for sale". When the Group is committed to a sale plan involving loss of control of a subsidiary and the sale is highly probable within 12 months, all the assets and liabilities of that subsidiary are classified as held for sale.

Once classified in this category, non-current assets and the group of assets and liabilities are measured at the lower of carrying amount or fair value less costs to sell.

Such assets are no longer depreciated. If an asset or group of assets and liabilities becomes impaired, an impairment loss is recognised in the profit and loss account. Impairment losses may be reversed.

Where a group of assets and liabilities held for sale represents a cash generating unit, it is categorised as a "discontinued operation". Discontinued operations include operations that are held for sale, operations that have been shut down, and subsidiaries acquired exclusively with a view to resell.

In this case, gains and losses related to discontinued operations are shown separately in the profit and loss account, on the line "Post-tax gain/loss on discontinued operations and assets held for sale". This line includes the post-tax profits or losses of discontinued operations, the post-tax gain or loss arising from remeasurement at fair value less costs to sell, and the post-tax gain or loss on disposal of the operation.

1.j EMPLOYEE BENEFITS

Employee benefits are classified in one of four categories:

- short-term benefits, such as salary, annual leave, incentive plans, profit-sharing and additional payments;
- long-term benefits, including compensated absences, long-service awards, and other types of cash-based deferred compensation;
- termination benefits;
- post-employment benefits, including top-up banking industry pensions and retirement bonuses in France and pension plans in other countries, some of which are operated through pension funds.

- **Short-term benefits**

The Group recognises an expense when it has used services rendered by employees in exchange for employee benefits.

- **Long-term benefits**

These are benefits, other than short-term benefits, post-employment benefits and termination benefits. This relates, in particular, to compensation deferred for more than 12 months and not linked to the BNP Paribas share price, which is accrued in the financial statements for the period in which it is earned.

The actuarial techniques used are similar to those used for defined-benefit post-employment benefits, except that the revaluation items are recognised in the profit and loss account and not in equity.

- **Termination benefits**

Termination benefits are employee benefits payable in exchange for the termination of an employee's contract as a result of either a decision by the Group to terminate a contract of employment before the legal retirement age, or a decision by an employee to accept voluntary redundancy in exchange for these benefits. Termination benefits due more than 12 months after the balance sheet date are discounted.

- **Post-employment benefits**

In accordance with IFRS, the BNP Paribas Group draws a distinction between defined-contribution plans and defined-benefit plans.

Defined-contribution plans do not give rise to an obligation for the Group and do not require a provision. The amount of the employer's contributions payable during the period is recognised as an expense.

Only defined-benefit schemes give rise to an obligation for the Group. This obligation must be measured and recognised as a liability by means of a provision.

The classification of plans into these two categories is based on the economic substance of the plan, which is reviewed to determine whether the Group has a legal or constructive obligation to pay the agreed benefits to employees.

Post-employment benefit obligations under defined-benefit plans are measured using actuarial techniques that take demographic and financial assumptions into account.

The net liability recognised with respect to post-employment benefit plans is the difference between the present value of the defined-benefit obligation and the fair value of any plan assets.

The present value of the defined-benefit obligation is measured on the basis of the actuarial assumptions applied by the Group, using the projected unit credit method. This method takes into account various parameters, specific to each country or Group entity, such as demographic assumptions, the probability that employees will leave before retirement age, salary inflation, a discount rate, and the general inflation rate.

When the value of the plan assets exceeds the amount of the obligation, an asset is recognised if it represents a future economic benefit for the Group in the form of a reduction in future contributions or a future partial refund of amounts paid into the plan.

The annual expense recognised in the profit and loss account under "Salaries and employee benefits", with respect to defined-benefit plans includes the current service cost (the rights vested by each employee during the period in return for service rendered), the net interests linked to the effect of discounting the net defined-benefit liability (asset), the past service cost arising from plan amendments or curtailments, and the effect of any plan settlements.

Remeasurements of the net defined-benefit liability (asset) are recognised in shareholders' equity and are never reclassified to profit or loss. They include actuarial gains and losses, the return on plan assets and any change in the effect of the asset ceiling (excluding amounts included in net interest on the defined-benefit liability or asset).

1.k SHARE-BASED PAYMENTS

Share-based payment transactions are payments based on shares issued by the Group, whether the transaction is settled in the form of equity or cash of which the amount is based on trends in the value of BNP Paribas shares.

IFRS 2 requires share-based payments granted after 7 November 2002 to be recognised as an expense. The amount recognised is the value of the share-based payment granted to the employee.

The Group grants employees stock subscription option plans and deferred share-based or share price-linked cash-settled compensation plans, and also offers them the possibility to purchase specially-issued BNP Paribas shares at a discount, on condition that they retain the shares for a specified period.

- **Stock option and share award plans**

The expense related to stock option and share award plans is recognised over the vesting period, if the benefit is conditional upon the grantee's continued employment.

Stock options and share award expenses are recorded under salary and employee benefits expenses, with a corresponding adjustment to shareholders' equity. They are calculated on the basis of the overall plan value, determined at the date of grant by the Board of Directors.

In the absence of any market for these instruments, financial valuation models are used that take into account any performance conditions related to the BNP Paribas share price. The total expense of a plan is determined by multiplying the unit value per option or share awarded by the estimated number of options or shares awarded vested at the end of the vesting period, taking into account the conditions regarding the grantee's continued employment.

The only assumptions revised during the vesting period, and hence resulting in a remeasurement of the expense, are those relating to the probability that employees will leave the Group and those relating to performance conditions that are not linked to the price value of BNP Paribas shares.

- **Share price-linked cash-settled deferred compensation plans**

The expense related to these plans is recognised in the year during which the employee rendered the corresponding services.

If the payment of share-based variable compensation is explicitly subject to the employee's continued presence at the vesting date, the services are presumed to have been rendered during the vesting period and the corresponding compensation expense is recognised on a pro rata basis over that period. The expense is recognised under salary and employee benefits expenses with a corresponding liability in the balance sheet. It is revised to take into account any non-fulfilment of the continued presence or performance conditions and the change in BNP Paribas share price.

If there is no continued presence condition, the expense is not deferred, but recognised immediately with a corresponding liability in the balance sheet. This is then revised on each reporting date until settlement to take into account any performance conditions and the change in the BNP Paribas share price.

1.l PROVISIONS RECORDED UNDER LIABILITIES

Provisions recorded under liabilities (other than those relating to financial instruments, employee benefits and insurance contracts) mainly relate to restructuring, claims and litigation, fines and penalties, and tax risks.

A provision is recognised when it is probable that an outflow of resources embodying economic benefits will be required to settle an obligation arising from a past event, and a reliable estimate can be made of the amount of the obligation. The amount of such obligations is discounted, where the impact of discounting is material, in order to determine the amount of the provision.

1.m CURRENT AND DEFERRED TAX

The current income tax charge is determined on the basis of the tax laws and tax rates in force in each country in which the Group operates during the period in which the income is generated.

Deferred taxes are recognised when temporary differences arise between the carrying amount of an asset or liability in the balance sheet and its tax base.

Deferred tax liabilities are recognised for all taxable temporary differences other than:

- taxable temporary differences on initial recognition of goodwill;
- taxable temporary differences on investments in enterprises under the exclusive or joint control of the Group, where the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences and unused carryforwards of tax losses only to the extent that it is probable that the entity in question will generate future taxable profits against which these temporary differences and tax losses can be offset.

Deferred tax assets and liabilities are measured using the liability method, using the tax rate which is expected to apply to the period when the asset is realised or the liability is settled, based on tax rates and tax laws that have been or will have been enacted by the balance sheet date of that period. They are not discounted.

Deferred tax assets and liabilities are offset when they arise within the same tax group, they fall under the jurisdiction of a single tax authority, and there is a legal right to offset.

Current and deferred taxes are recognised as tax income or expenses in the profit and loss account, except for those relating to a transaction or an event directly recognised in shareholders' equity, which are also recognised in shareholders' equity.

When tax credits on revenues from receivables and securities are used to settle corporate income tax payable for the period, the tax credits are recognised on the same line as the income to which they relate. The corresponding tax expense continues to be carried in the profit and loss account under "Corporate income tax".

1.n CASH FLOW STATEMENT

The cash and cash equivalents balance is composed of the net balance of cash accounts and accounts with central banks, and the net balance of interbank demand loans and deposits.

Changes in cash and cash equivalents related to operating activities reflect cash flows generated by the Group's operations, including those relating to financial investments of insurance activities and negotiable certificates of deposit.

Changes in cash and cash equivalents related to investing activities reflect cash flows resulting from acquisitions and disposals of subsidiaries, associates or joint ventures included in the consolidated group, as well as acquisitions and disposals of property, plant and equipment excluding investment property and property held under operating leases.

Changes in cash and cash equivalents related to financing activities reflect the cash inflows and outflows resulting from transactions with shareholders, cash flows related to bonds and subordinated debt, and debt securities (excluding negotiable certificates of deposit).

1.o USE OF ESTIMATES IN THE PREPARATION OF THE FINANCIAL STATEMENTS

Preparation of the financial statements requires managers of core businesses and corporate functions to make assumptions and estimates that are reflected in the measurement of income and expense in the profit and loss account and of assets and liabilities in the balance sheet, and in the disclosure of information in the notes to the financial statements. This requires the managers in question to exercise their judgement and to make use of information available at the date of the preparation of the financial statements when making their estimates. The actual future results from operations where managers have made use of estimates may in reality differ significantly from those estimates, mainly according to market conditions. This may have a material effect on the financial statements.

This applies in particular to:

- the analysis of the cash flow criterion for specific financial assets;
- the measurement of expected credit losses. This applies in particular to the assessment of significant increase in credit risk, the models and assumptions used to measure expected credit losses, the determination of the different economic scenarios and their weighting;
- the analysis of renegotiated loans;
- the use of internally-developed models to measure positions in financial instruments that are not quoted in active markets;
- calculations of the fair value of unquoted financial instruments classified in "Financial assets at fair value through equity", or in "Financial instruments at fair value through profit or loss", whether as assets or liabilities, and more generally calculations of the fair value of financial instruments subject to a fair value disclosure requirement;
- whether a market is active or inactive for the purposes of using a valuation technique;
- impairment tests performed on intangible assets;
- the appropriateness of the designation of certain derivative instruments such as cash flow hedges, and the measurement of hedge effectiveness;
- estimates of the residual value of assets leased under finance leases or operating leases, and more generally of assets on which depreciation is charged net of their estimated residual value;
- the measurement of provisions for contingencies and charges. In particular, while investigations and litigations are ongoing, it is difficult to foresee their outcome and potential impact. Provision estimation is established by taking into account all available information at the date of the preparation of the financial statements, in particular the nature of the dispute, the underlying

facts, the ongoing legal proceedings and court decisions, including those related to similar cases. The Group may also use the opinion of experts and independent legal advisers to exercise its judgement.

This is also the case for assumptions applied to assess the sensitivity of each type of market risk and the sensitivity of valuations to non-observable parameters.

2. IMPACTS OF PRESENTATION CHANGES AND OF THE FIRST TIME ADOPTION OF IFRS 9 AND IFRS 15

As at 31 December 2017, the BNP Paribas Group operated presentation changes and recognised securities at their settlement date:

- Financial instruments of insurance entities, which continue to be recognised according to IAS 39 until 31 December 2020, have been grouped on separate lines of the balance sheet, of the profit and loss account and of the statement of net income and changes in assets and liabilities recognised directly in equity;
- Ahead of the implementation of IFRS 9 "Financial instruments" as of 1 January 2018, a few item headings have been renamed in the balance sheet, the profit and loss account and in the statement of net income and changes in assets and liabilities recognised directly in equity;
- In order to align the definition of "credit institutions" in the financial statements with the definition used in regulatory reportings, outstanding balances with some counterparties were reclassified from "Loans and advances to credit institutions" to "Loans and advances to customers";
- Securities transactions, previously recognised at trade date, are now recognised at settlement date. This new representation of securities converges with rules applied for liquidity ratios.

The impacts of these changes on the balance sheet, the profit and loss account and on the statement of net income and changes in assets and liabilities recognised directly in equity are presented in note 2.a.

Then, as of 1 January 2018, the BNP Paribas Group has applied the new accounting standards IFRS 9 and IFRS 15:

- Financial instruments held by non-insurance entities have been classified and measured in accordance with IFRS 9 "Financial instruments";
- IFRS 15 "Revenue from Contracts with Customers" has been applied without any significant change to the balance sheet.

The impacts of the IFRS 9 and IFRS 15 first time adoption are presented in note 2.b.

2.a Impacts of presentation changes and of the securities accounting at settlement date

- **Balance sheet**

In millions of euros	31 December 2017 *IAS 39 former presentation*	Reclassification of financial instruments of insurance entities *(a)*	Re-labelling of financial instruments items	Other reclassifications	Effects of securities transactions previously recognised at trade date *(g)*	31 December 2017 *IAS 39 revised presentation*
ASSETS						
Cash and balances at central banks	178,446					178,446
Financial instruments at fair value through profit or loss						
Securities	119,452		470*(b)*		3,042	122,964
Loan and repurchase agreements	143,558		224*(b)*		206	143,988
Instruments designated as at fair value through profit or loss	96,932	(96,238)	(694)*(b)*			
Derivative financial instruments	230,230	(333)				229,897
Derivatives used for hedging purposes	13,756	(33)				13,723
Available-for-sale financial assets	231,975	(114,166)	(117,809)*(c)*			
Financial assets at fair value through equity						
Debt securities			110,881*(c)*			110,881
Equity securities			6,928*(c)*			6,928
Financial assets at amortised cost						
Loans and advances to credit institutions	45,670	(1,134)	(378)*(d)*	(23,753)*(f)*		20,405
Loans and advances to customers	727,675	(1,976)	(14,439)*(d)*	23,753*(f)*		735,013
Debt securities			15,378*(d)*			15,378
Remeasurement adjustment on interest-rate risk hedged portfolios	3,064					3,064
Held-to-maturity financial assets	4,792	(4,231)	(561)*(d)*			
Financial investments of insurance activities		227,712				227,712
Current and deferred tax assets	6,568					6,568
Accrued income and other assets	107,211	(3,002)			(11,334)	92,875
Equity-method investments	6,812	(386)				6,426
Property, plant and equipment and investment property	31,213	(6,213)				25,000
Intangible assets	3,327					3,327
Goodwill	9,571					9,571
TOTAL ASSETS	1,960,252	-	-	-	(8,086)	1,952,166
LIABILITIES						
Deposit from central banks	1,471					1,471
Financial instruments at fair value through profit or loss						
Securities	69,313				(2,226)	67,087
Deposits and repurchase agreements	172,147		2,498*(b)*			174,645
Instruments designated as at fair value through profit or loss	53,441		(53,441)*(b)*			
Issued debt securities			50,943*(b)*		(453)	50,490
Derivative financial instruments	228,019	(375)				227,644
Derivatives used for hedging purposes	15,682					15,682
Financial liabilities at amortised cost						
Deposits from credit institutions	76,503					76,503
Deposits from customers	766,890	(5,949)				760,941
Debt securities	148,156					148,156
Subordinated debt	15,951					15,951
Remeasurement adjustment on interest-rate risk portfolios	2,372					2,372
Current and deferred tax liabilities	2,466					2,466
Accrued expenses and other liabilities	86,135	(734)			(5,407)	79,994
Technical reserves and other insurance liabilities	203,436	7,058				210,494
Provisions for contingencies and charges	11,061					11,061
TOTAL LIABILITIES	1,853,043	-	-	-	(8,086)	1,844,957
EQUITY						
Share capital, additional paid-in capital and retained earnings	*91,094*		(68)*(e)*			*91,026*
Net income for the period attributable to shareholders	*7,759*					*7,759*
Total capital, retained earnings and net income for the period attributable to shareholders	98,853	-	(68)	-	-	98,785
Changes in assets and liabilities recognized directly in equity that will not be reclassified to profit or loss			68 *(e)*			68
Changes in assets and liabilities recognized directly in equity that may be reclassified to profit or loss	3,130					3,130
Shareholders' equity	101,983	-	-	-	-	101,983
Retained earnings and net income for the period attributable to minority interests	5,352		30 *(e)*			5,382
Changes in assets and liabilities recognized directly in equity that will not be reclassified to profit or loss			(30)*(e)*			(30)
Changes in assets and liabilities recognized directly in equity that may be reclassified to profit or loss	(126)					(126)
Minority interests	5,226	-	-	-	-	5,226
TOTAL EQUITY	107,209	-	-	-	-	107,209
TOTAL LIABILITIES AND EQUITY	1,960,252	-	-	-	(8,086)	1,952,166

The balance sheet as at 31 December 2017 has undergone the following presentation changes:

(a) Financial instruments of the Group's insurance entities continue to be recognised and presented in accordance with IAS 39. On the asset side, they amount to EUR 228 billion and are classified in "Financial investments of insurance activities". These assets were mainly presented previously within "Available-for-sale financial assets" (EUR 114 billion) and within "Instruments designated as at fair value through profit or loss" (EUR 96 billion). The amount of financial liabilities reclassified is less material.

The Group renamed balance sheet item headings and details in this table the re-labelling from former headings and to new headings:

(b) "Instruments designated as at fair value through profit or loss", previously presented on specific asset and liability lines, have been broken down by type of instruments within "Financial instruments at fair value through profit or loss". On the liability side of the balance sheet, EUR 53 billion were split between EUR 51 billion of "Debt securities" and EUR 2 billion of "Deposits and repurchase agreements".

(c) « Available-for-sale financial assets » were re-labelled into « Financial assets at fair value through equity ».

(d) « Held-to-maturity financial assets » and securities previously included in « Loans and advances to customers » and « Loans and advances to credit institutions » were grouped into the « Debt securities » sub-section of « Financial assets at amortised cost ».

(e) Remeasurement gains (losses) related to post-employment benefit plans were presented separately within the new heading « Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss ».

(f) In order to align the definition of "credit institutions" in the financial statements and in the FINREP regulatory reports, some counterparties were reclassified from "Loans and advances to credit institutions" to "Loans and advances to customers" for an amount of EUR 24 billion.

Moreover, the settlement date accounting of securities *(g)* led to a decrease in the total balance sheet of EUR 8 billion (mainly due to a EUR 11 billion decrease in "Accrued income and other assets").

- **Profit and loss account**

In millions of euros	Year ended 31 Dec. 2017 IAS 39 *former presentation*	Reclassification of income and expense from insurance activities	Re-labelling of financial instruments item headings	Reclassification of interest income and expense on trading instruments	Year ended 31 Dec. 2017 IAS 39 *revised presentation*
Interest income	40,785	(3,485)		(3,734)	33,566
Interest expense	(19,011)	2,995		3,641	(12,375)
Commission income	13,231	(288)			12,943
Commission expense	(5,777)	2,264			(3,513)
Net gains on financial instruments at fair value through profit or loss	5,733	(480)		93	5,346
Net gains on available-for-sale financial assets and other financial assets not measured at fair value	2,338	(572)	(1,766)		
of which net gains on available-for-sale financial instruments	*2,283*	*(572)*	*(1,711)*		
of which net gains on loans and receivables and held-to-maturity financial assets	*55*		*(55)*		
Net gains on financial instruments at fair value through equity			1,711		1,711
Net gains on derecognised amortised-cost financial assets			55		55
Net income from insurance activities		3,813			3,813
Income from other activities	42,041	(30,344)			11,697
Expense on other activities	(36,179)	26,097			(10,082)
REVENUES	**43,161**	-	-	-	**43,161**
Salary and employee benefit expense	(16,496)				(16,496)
Other operating expenses	(11,729)				(11,729)
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	(1,719)				(1,719)
GROSS OPERATING INCOME	**13,217**	-	-	-	**13,217**
Cost of risk	(2,907)				(2,907)
OPERATING INCOME	**10,310**	-	-	-	**10,310**
Share of earnings of equity-method entities	713				713
Net gain on non-current assets	488				488
Goodwill	(201)				(201)
PRE-TAX INCOME	**11,310**	-	-	-	**11,310**
Corporate income tax	(3,103)				(3,103)
NET INCOME	**8,207**	-	-	-	**8,207**
Net income attributable to minority interests	448				448
NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS	**7,759**	-	-	-	**7,759**

Income and expense from insurance activities have been reclassified into « Net income from insurance activities », which amounts to EUR 3,813 million, thus including:

- Gross written premiums and changes in unearned premiums from insurance contracts and investment contracts with discretionary participating features according to IFRS 4;
- Investments income, net of expense ;
- Amortisation of deferred acquisition costs;
- Claims and benefits expenses;
- Net result from reinsurance ceded.

Other income and expense amounts related to insurance entities are grouped, depending on their nature, with amounts presented on other profit or loss headings.

Moreover, interest income and expense from trading instruments, previously presented under "Interest income / expense", are now presented within « Net gain on financial instruments at fair value through profit or loss » (net amount of EUR 93 million for 2017).

- **Statement of net income and changes in assets and liabilities recognised directly in equity**

In millions of euros	Year ended 31 Dec. 2017 IAS 39 *former presentation*	Reclassification of changes in value of investments of insurance activities	Re-labelling of financial instruments item headings	Year ended 31 Dec. 2017 IAS 39 *revised presentation*
Net income for the period	**8,207**	**-**	**-**	**8,207**
Changes in assets and liabilities recognised directly in equity	**(3,019)**	**-**	**-**	**(3,019)**
Items that are or may be reclassified to profit or loss	**(3,171)**	**-**	**-**	**(3,171)**
- Changes in exchange rate items	(2,589)			(2,589)
- Changes in fair value of financial assets at fair value through equity				
Changes in fair value recognised in equity			679	679
Changes in fair value reclassified to net income			(837)	(837)
- Changes in fair value of available-for-sale financial assets, including those reclassified as loans and receivables				
Changes in fair value recognised in equity	436	243	(679)	
Changes in fair value reclassified to net income	(862)	25	837	
- Changes in fair value of investments of insurance activities				
Changes in fair value recognised in equity		(243)		(243)
Changes in fair value reclassified to net income		(25)		(25)
- Changes in fair value of hedging instruments				
Changes in fair value recognised in equity	(237)			(237)
Changes in fair value reclassified to net income	4			4
- Income tax	426			426
- Changes in equity-method investments	(349)			(349)
Items that will not be reclassified to profit or loss	**152**	**-**	**-**	**152**
- Remeasurement gains (losses) related to post-employment benefit plans	177			177
- Income tax	(25)			(25)
TOTAL	**5,188**	**-**	**-**	**5,188**
- Attributable to equity shareholders	4,956			4,956
- Attributable to minority interests	232			232

2.b IMPACTS OF THE ADOPTION OF IFRS 9 AND IFRS 15

- **Synthesis of IFRS 9 and IFRS 15 first time adoption impacts on the balance sheet as at 1 January 2018**

In millions of euros	31 December 2017 IAS 39 *revised presentation*	Impacts of the IFRS 9 adoption: Reclassifications	Impacts of the IFRS 9 adoption: Remeasurements Phase 1	Impacts of the IFRS 9 adoption: Remeasurements Phase 2	Impacts of the IFRS 15 adoption	1 January 2018 *IFRS 9 et IFRS 15*
ASSETS						
Cash and balances at central banks	178,446			(13)		**178,433**
Financial instruments at fair value through profit or loss						
Securities	122,964	7,353	9			**130,326**
Loans and repurchase agreements	143,988	980	(20)			**144,948**
Derivative financial instruments	229,897	(1)				**229,896**
Derivatives used for hedging purposes	13,723	(2)				**13,721**
Financial assets at fair value through equity						
Debt securities	110,881	(57,008)	91	(22)		**53,942**
Equity securities	6,928	(4,598)				**2,330**
Financial assets at amortised cost						
Loans and advances to credit institutions	20,405			(49)		**20,356**
Loans and advances to customers	735,013	(980)		(2,857)		**731,176**
Debt securities	15,378	54,256	(172)	(36)		**69,426**
Remeasurement adjustment on interest-rate risk hedged portfolios	3,064					**3,064**
Financial investments of insurance activities	227,712					**227,712**
Current and deferred tax assets	6,568		30	754	16	**7,368**
Accrued income and other assets	92,875			(12)	98	**92,961**
Equity-method investments	6,426		(62)	(143)		**6,221**
Property, plant and equipment and investment property	25,000					**25,000**
Intangible assets	3,327					**3,327**
Goodwill	9,571					**9,571**
TOTAL ASSETS	**1,952,166**	**-**	**(124)**	**(2,378)**	**114**	**1,949,778**
LIABILITIES						
Deposits from central banks	1,471					**1,471**
Financial instruments at fair value through profit or loss						
Securities	67,087					**67,087**
Deposits and repurchase agreements	174,645					**174,645**
Issued debt securities	50,490					**50,490**
Derivative financial instruments	227,644					**227,644**
Derivatives used for hedging purposes	15,682					**15,682**
Financial liabilities at amortised cost						
Deposits from credit institutions	76,503					**76,503**
Deposits from customers	760,941					**760,941**
Debt securities	148,156					**148,156**
Subordinated debt	15,951					**15,951**
Remeasurement adjustment on interest-rate risk hedged portfolios	2,372					**2,372**
Current and deferred tax liabilities	2,466		5	(245)	8	**2,234**
Accrued income and other assets	79,994				478	**80,472**
Technical reserves and other insurance liabilities	210,494					**210,494**
Provisions for contingencies and charges	11,061			371	(348)	**11,084**
TOTAL LIABILITIES	**1,844,957**	**-**	**5**	**126**	**138**	**1,845,226**
EQUITY						
Share capital, additional paid-in capital and retained earnings	*91,026*	*1,308*	*(12)*	*(2,418)*	*(24)*	***89,880***
Net income for the period attributable to shareholders	*7,759*					***7,759***
Total capital, retained earnings and net income for the period attributable to shareholders	**98,785**	**1,308**	**(12)**	**(2,418)**	**(24)**	**97,639**
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	68	238				**306**
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	3,130	(1,546)	(103)			**1,481**
Shareholders' equity	**101,983**	**-**	**(115)**	**(2,418)**	**(24)**	**99,426**
Retained earnings and net income for the period attributable to minority interests	5,382	18	1	(86)		**5,315**
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	(30)	3				**(27)**
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	(126)	(21)	(15)			**(162)**
Minority interests	**5,226**	**-**	**(14)**	**(86)**	**-**	**5,126**
TOTAL EQUITY	**107,209**	**-**	**(129)**	**(2,504)**	**(24)**	**104,552**
TOTAL LIABILITIES AND EQUITY	**1,952,166**	**-**	**(124)**	**(2,378)**	**114**	**1,949,778**

The application of IFRS 15 mainly consisted in reviewing the accounting treatment applied to commission income and income from other activities. As far as the latter are concerned, the post-tax impact of IFRS 15 adoption on shareholders' equity as at 1 January 2018 amounts to EUR -24 million. This impact is generated by:

- a change in the timing of recognition of revenues derived from maintenance services offered by operating lease entities, previously recognised on a linear basis and now recognised to the extent of the costs incurred,
- a change in the timing of recognition of revenues derived from real estate programmes, due to the land part of sale contracts in the future state of completion, when the control is transferred.

Income from these activities is recognised in the profit and loss account within "Income / expense from other activities".

- **Detail of the impacts of IFRS 9 and IFRS 15 adoption on the balance sheet**

In millions of euros	31 December 2017 IAS 39 *revised presentation*	Reclassification phase 1							Balance after reclassification Phase 1
		IAS 39 original categories				Reclassification of debt remeasurement effect arising from the Group issuer risk	Other reclassifications	TOTAL	
		Available-for-sale financial assets at fair value through equity		Held-to-maturity financial assets at amortised cost					
		Debt securities	Equity securities	Debt securities	Loans and receivables				
ASSETS									
Cash and balances at central banks	178,446							-	178,446
Financial instruments at fair value through profit or loss									
Securities	122,964	1,536 (b)	4,598 (c)	1,216 (f)			3	7,353	130,317
Loans and repurchase agreements	143,988				980 (f)			980	144,968
Derivative financial instruments	229,897						(1)	(1)	229,896
Derivatives uses for hedging purposes	13,723						(2)	(2)	13,721
Financial assets at fair value through equity									
Debt securities	110,881	(58,500)(a)(b)		1,492 (e)				(57,008)	53,873
Equity securities	6,928		(4,598)(c)					(4,598)	2,330
Financial assets at amortised cost									
Loans and advances to credit institutions	20,405							-	20,405
Loans and advances to customers	735,013				(980)(f)			(980)	734,033
Debt securities	15,378	56,964 (a)		(2,708)(e)(f)				54,256	69,634
Remeasurement adjustment on interest-rate risk hedged portfolios	3,064							-	3,064
Financial investments of insurance activities	227,712							-	227,712
Current and deferred tax assets	6,568							-	6,568
Accrued income and other assets	92,875							-	92,875
Equity-method investments	6,426							-	6,426
Property, plant and equipment and investment property	25,000							-	25,000
Intangible assets	3,327							-	3,327
Goodwill	9,571							-	9,571
TOTAL ASSETS	**1,952,166**	-	-	-	-	-	-	-	**1,952,166**
TOTAL LIABILITIES	**1,844,957**	-	-	-	-	-	-	-	**1,844,957**
of which current and deferred tax liabilities	2,466							-	2,466
of which accrued expenses and other liabilities	79,994							-	79,994
of which provisions for contingencies and charges	11,061							-	11,061
EQUITY									
Capital, retained earnings and net income for the period attributable to shareholders	98,785	46 (b)	938 (c)			323 (g)	1	1,308	100,093
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	68		561 (d)			(323)(g)		238	306
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	3,130	(46)	(1,499)(c)(d)				(1)	(1,546)	1,584
Shareholders' equity	**101,983**	-	-	-	-	-	-	-	**101,983**
Retained earnings and net income for the period attributable to minority interests	5,382	5 (b)	14 (c)			(1)(g)		18	5,400
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	(30)		2 (d)			1 (g)		3	(27)
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	(126)	(5)	(16)(c)(d)					(21)	(147)
Minority interests	**5,226**	-	-	-	-	-	-	-	**5,226**
TOTAL EQUITY	**107,209**	-	-	-	-	-	-	-	**107,209**
TOTAL LIABILITIES AND EQUITY	**1,952,166**	-	-	-	-	-	-	-	**1,952,166**

The adoption of IFRS 9 provisions related to the classification and measurement of financial instruments led to the following impacts as of 1 January 2018:

- Securities previously classified as available-for-sale financial assets recognised at fair value through equity:

  (a) Treasury bills, Government bonds and other debt securities previously recognised as at fair value through equity for which the business model consists of collecting contractual cash flows have been classified at amortised cost for EUR 57 billion; their cumulated changes in value, which were included in equity as at 31 December 2017 were cancelled (EUR 170 million before tax, or EUR 111 million in equity attributable to shareholders). The analysis of the managing model of securities held by Group ALM Treasury led to a split of this portfolio into approximately equivalent in size « collect » and « collect and sell » business models.

  (b) By way of exception, EUR 1.5 billion for which the contractual cash flows do not consist solely of payments relating to principal and interest on the principal are measured at fair value through profit and loss. Within shareholders' equity, this classification triggered the transfer of EUR 46 million (Group share) from "Changes in assets and liabilities recognised directly in equity" to "Retained earnings".

  (c) Investments in equity instruments such as shares were classified as financial instruments at fair value through profit or loss for EUR 4.6 billion. This classification triggered the transfer of EUR 938 million net unrealised gain (Group share) from "Changes in assets and liabilities recognised directly in equity" to "Retained earnings".

  (d) The option of recognising equity securities at fair value through equity was retained for EUR 2.3 billion. This classification triggered the transfer of EUR 561 million net unrealised gain (Group share) from "Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss" to "Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss".

In millions of euros	Balances after phase 1 reclassifications	Remeasurement - phase 1					Total phase 1	Impairment ajustments phase 2	TOTAL IFRS 9 Impact	IFRS 15 Impact	1 January 2018
		From available-for-sale debt securities to amortised cost	From Loans and receivables to Financial assets at fair value through equity	From Loans and receivables to Financial instruments at fair value through profit or loss	Other adjustments	TOTAL					
ASSETS											
Cash and balances at central banks	178,446					-	-	(13)	(13)		178,433
Financial instruments at fair value through profit or loss											
Securities	130,317			25 (f)	(16)	9	7,362		7,362		130,326
Loans and repurchases agreements	144,968			(10)(f)	(10)	(20)	960		960		144,948
Derivative financial instruments	229,896					-	(1)		(1)		229,896
Derivatives uses for hedging purposes	13,721					-	(2)		(2)		13,721
Financial assets at fair value through equity											
Debt securities	53,873		84 (e)		7	91	(56,917)	(22)	(56,939)		53,942
Equity securities	2,330					-	(4,598)		(4,598)		2,330
Financial assets at amortised cost											
Loans and advances to credit institutions	20,405					-	-	(49)	(49)		20,356
Loans and advances to customuers	734,033					-	(980)	(2,857)	(3,837)		731,176
Debt securities	69,634	(170)(a)			(2)	(172)	54,084	(36)	54,048		69,426
Remeasurement adjustment on interest-rate risk hedged portfolios	3,064					-	-				3,064
Financial investments of insurance activities	227,712					-	-				227,712
Current and deferred tax assets	6,568	42 (a)	(25)(e)	(9)(f)	22	30	30	754	784	16	7,368
Accrued income and other assets	92,875					-	-	(12)	(12)	98	92,961
Equity-method investments	6,426				(62)(h)	(62)	(62)	(143)	(205)		6,221
Property, plant and equipment and investment property	25,000					-	-				25,000
Intangible assets	3,327					-	-				3,327
Goodwill	9,571					-	-				9,571
TOTAL ASSETS	**1,952,166**	**(128)**	**59**	**6**	**(61)**	**(124)**	**(124)**	**(2,378)**	**(2,502)**	**114**	**1,949,778**
TOTAL LIABILITIES	**1,844,957**				**5**	**5**	**5**	**126**	**131**	**138**	**1,845,226**
of which current and deferred tax liabilities	2,466				5	5	5	(245)	(240)	8	2,234
of which accrued expenses and other liabilities	79,994					-	-			478	80,472
of which provisions for contingencies and charges	11,061					-	-	371	371	(348)	11,084
EQUITY											
Capital, retained earnings and net income for the period attributable to shareholders	100,093			5 (f)	(17)	(12)	1,296	(2,418)	(1,122)	(24)	97,639
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	306						238		238		306
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	1,584	(111)(a)	59 (e)		(51)	(103)	(1,649)		(1,649)		1,481
Shareholders' equity	**101,983**	**(111)**	**59**	**5**	**(68)**	**(115)**	**(115)**	**(2,418)**	**(2,533)**	**(24)**	**99,426**
Retained earnings and net income for the period attributable to minority interests	5,400			1		1	19	(86)	(67)		5,315
Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	(27)					-	3		3		(27)
Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	(147)	(17)(a)			2	(15)	(36)		(36)		(162)
Minority interests	**5,226**	**(17)**		**1**	**2**	**(14)**	**(14)**	**(86)**	**(100)**	**-**	**5,126**
TOTAL EQUITY	**107,209**	**(128)**	**59**	**6**	**(66)**	**(129)**	**(129)**	**(2,504)**	**(2,633)**	**(24)**	**104,552**
TOTAL LIABILITIES AND EQUITY	**1,952,166**	**(128)**	**59**	**6**	**(61)**	**(124)**	**(124)**	**(2,378)**	**(2,502)**	**114**	**1,949,778**

- Loans and receivables and assets held to maturity recognised at amortised cost:

  (e) reclassification of debt securities previously included in « Loans and advances » into « Financial assets at fair value through equity » for EUR 1.5 billion, based on their « collect and sell » business model. A EUR 84 million difference (before tax) between the fair value of these securities and their previous net carrying amount was recognised in assets, and a EUR 59 million after tax (Group share) revaluation was recognised in « changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss ».

  (f) reclassification of loans and debt securities previously included in “Loans and advances” into “Financial instruments at fair value through profit or loss” for respectively EUR 1 billion and EUR 1.2 billion. It is notably the case for instruments for which the cash flow criterion is not met: instruments indexed on a benchmark rate presenting a modified time value, and securitization junior notes held. Non-significant fair value adjustments have been booked in retained earnings following this reclassification.

With respect to financial liabilities, the main change introduced by IFRS 9 relates to the recognition of changes in fair value attributable to changes in the credit risk of the liabilities designated as at fair value through profit or loss (fair value option), which are recognised on a separate line in shareholders’ equity and no longer through profit or loss. Thus, EUR 323 million cumulated changes in value (Group share) were reclassified as of 1 January 2018 from “retained earnings” into “changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss” *(g)*.

The main “other adjustment” is related to the application of the IFRS 9 provisions on classification and measurement of financial instruments by equity-method entities *(h)*.

- **Reconciliation between IAS 39 and the IAS 37 impairment provisions and the IFRS 9 expected credit losses**

The impact of the new impairment model defined by IFRS 9 is an increase in the impairment of financial instruments by EUR 3.3 billion before tax (a decrease in the value of "Loans and advances to customers" by EUR 2.9 billion and an increase in the amount of "Provisions for contingencies and charges" related to financing and guarantee commitments by EUR 0.4 billion).

The impairment increase is mainly due to the introduction of stage 1 (EUR 1.7 billion), for which the major portion of related assets were not subject to impairment under the IAS 39 model, as well as the consideration of prospective information such as asset sale scenarios, notably for stage 3 assets.

In millions of euros	31 December 2017 *IAS 39*	From Loans and receivables to Financial instruments at fair value through profit or loss	From available-for-sale debt securities to amortised cost	From available-for-sale debt securities to assets at fair value through equity	From available-for-sale debt securities to assets at fair value through profit or loss	Change in impairment calculation method	Other impacts	1 January 2018 *IFRS 9*
Cash and balances at central banks						13		13
Financial instruments at fair value through profit or loss	89	128			31		(58)	190
Available-for-sale financial assets	146		(5)	(110)	(31)			-
Financial assets at fair value through equity				110		22	(1)	131
Financial assets at amortised cost								
Loans and advances to credit institutions	109					49	(12)	146
Loans and advances to customers	24,686	(128)				2,857	(5)	27,410
Debt securities			5			36	61	102
Other assets	63					12		75
Commitments and other items	906					371		1,277
Total expected credit losses	**25,999**	**-**	**-**	**-**	**-**	**3,360**	**(15)**	**29,344**
of which collective impairment	3,421							
of which stage 1 impairment								1,678
of which stage 2 impairment								3,972
of which stage 3 / specific impairment	22,578							23,694

- **Financial instruments at fair value through equity under IAS 39, reclassified at amortised cost under IFRS 9**

IAS 39 accounting categories In millions of euros	IFRS 9 accounting categories	Carrying value at 31 December 2018	Fair value at 31 December 2018	Change in value which would have been recognised in equity during the year to 31 dec. 2018
Available-for-sale financial assets	**Financial assets at amortised cost**			
	Debt securities	44,332	43,866	(599)

3. NOTES TO THE PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2018

3.a NET INTEREST INCOME

The BNP Paribas Group includes in "interest and similar income" and "interest and similar expenses" all income and expense from financial instruments measured at amortised cost (interest, fees and transaction costs) and from financial instruments measured at fair value through equity. These amounts are calculated using the effective interest method.

These items also include the interest income and expense of non-trading financial instruments the characteristics of which do not allow for recognition at amortised cost or at fair value through equity, as well as of financial instruments that the Group has designated as at fair value through profit or loss. The change in fair value on financial instruments at fair value through profit or loss (excluding accrued interest) is recognised under "Net gain on financial instruments at fair value through profit or loss".

Interest income and expense on derivatives accounted for as fair value hedges are included with the revenues generated by the hedged item. Similarly, interest income and expense arising from derivatives used to hedge transactions designated as at fair value through profit or loss is allocated to the same accounts as the interest income and expense relating to the underlying transactions.

	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*			Year to 31 Dec. 2017 *IAS 39*		
In millions of euros	Income	Expense	Net	Income	Expense	Net
Financial instruments at amortised cost	**29,115**	**(10,482)**	**18,633**	**26,923**	**(8,498)**	**18,425**
Deposits, loans and borrowings	26,957	(8,069)	18,888	25,601	(6,502)	19,099
Repurchase agreements	152	(59)	93	132	(62)	70
Finance leases	1,312	(73)	1,239	1,157	(62)	1,095
Debt securities	694		694	33		33
Issued debt securities and subordinated debt		(2,281)	(2,281)		(1,872)	(1,872)
Financial instruments at fair value through equity	**965**	**-**	**965**	**1,331**	**-**	**1,331**
Debt securities	965		965	1,331		1,331
Financial instruments at fair value through profit or loss (Trading securities excluded)	**42**	**(442)**	**(400)**	**64**	**(317)**	**(253)**
Cash flow hedge instruments	**2,941**	**(1,369)**	**1,572**	**3,500**	**(2,004)**	**1,496**
Interest rate portfolio hedge instruments	**2,660**	**(2,368)**	**292**	**1,748**	**(1,556)**	**192**
Total interest income/(expense)	**35,723**	**(14,661)**	**21,062**	**33,566**	**(12,375)**	**21,191**

Interest on financial instruments at amortised cost includes, for the year ended 31 December 2017, interest income and expenses on held-to-maturity financial assets, customer and interbank items and debt issued by the group (excluding issues that the Group has designated as at fair value through profit or loss).

Interest on financial instruments at fair value through equity corresponds, for the year ended 31 December 2017, to interest on debt securities available for sale, of which about half of the portfolio (EUR 57 billion) was reclassified at amortised cost as of 1 January 2018. This reclassification mainly explains the variation of interest on debt securities within interest on financial instruments at amortised cost between the two periods.

Interest on financial instruments at fair value through profit or loss corresponds, for the year ended 31 December 2017, to interest income and expenses on financial instruments that the Group designated as at fair value through profit or loss. For the year ended 31 December 2018, this aggregate also includes interest on non-trading financial instruments whose characteristics prevent their classification at amortised cost or at fair value through equity.

The effective interest rate applied on the second series of Targeted Longer-Term Refinancing Operations (TLTRO II) conducted by the European Central Bank takes into account a 40 bp interest incentive.

Interest income on individually impaired loans amounted to EUR 454 million for the year ended 31 December 2018, compared to EUR 547 million for the year ended 31 December 2017.

3.b COMMISSION INCOME AND EXPENSE

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*			Year to 31 Dec. 2017 *IAS 39*		
	Income	Expense	Net	Income	Expense	Net
Customer transactions	3,901	(1,157)	2,744	3,589	(908)	2,681
Securities and derivatives transactions	1,729	(1,187)	542	2,078	(1,183)	895
Financing and guarantee commitments	1,102	(44)	1,058	1,079	(39)	1,040
Asset management and other services	4,723	(246)	4,477	4,479	(204)	4,275
Others	1,470	(1,084)	386	1,718	(1,179)	539
Commission income/expense	**12,925**	**(3,718)**	**9,207**	**12,943**	**(3,513)**	**9,430**
- of which net commission income related to trust and similar activities through which the Group holds or invests assets on behalf of clients, trusts, pension and personal risk funds or other institutions	*2,834*	*(261)*	*2,573*	*2,743*	*(203)*	*2,540*
- of which commission income and expense on financial instruments not measured at fair value through profit or loss	*3,005*	*(427)*	*2,578*	*2,670*	*(343)*	*2,327*

3.c NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Net gain on financial instruments measured at fair value through profit or loss includes all profit and loss items relating to financial instruments managed in the trading book, non-trading equity instruments that the Group did not choose to measure at fair value through equity, financial instruments that the Group has designated as at fair value through profit or loss, as well as debt instruments whose cash flows are not solely repayments of principal and interest on the principal or whose business model is not to collect cash flows nor to collect cash flows and sell the assets.

These income items include dividends on these instruments and exclude interest income and expense from financial instruments designated as at fair value through profit or loss and instruments whose cash flows are not only repayments of principal and interest on the principal or whose business model is not to collect cash flows nor to collect cash flows and sell the assets, which are presented in “interest margin” (note 3.a).

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Trading book	**(1,470)**	**7,045**
Interest rate and credit instruments	1,975	1,112
Equity financial instruments	(2,926)	4,961
Foreign exchange financial instruments	1,432	823
Loans and repurchase agreements	(1,126)	(509)
Other financial instruments	(825)	658
Financial instruments designated as at fair value through profit or loss	**6,756**	**(1,781)**
of which debt remeasurement effect arising from BNP Paribas Group issuer risk[(1)]		*(61)*
Other financial instruments at fair value through profit or loss	**533**	
Debt instruments	(38)	
Equity instruments	571	
Impact of hedge accounting	**(11)**	**82**
Fair value hedging derivatives	134	62
Hedged items in fair value hedge	(145)	20
Net gain on financial instruments at fair value through profit or loss	**5,808**	**5,346**

[(1)]Debt remeasurement effect arising from BNP Paribas Group issuer risk (Own Credit Adjustment - OCA) is recognised as of 1 January 2018 in equity, within "Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss".

Gains and losses on financial instruments designated as at fair value through profit or loss are mainly related to instruments whose changes in value may be compensated by changes in the value of economic hedging trading book instruments.

Net gains on the trading book in 2018 and 2017 include a non-material amount related to the ineffective portion of cash flow hedges.

Potential sources of ineffectiveness can be attributed to differences between hedging instruments and hedged items, notably generated by mismatches in the terms of hedged and hedging instruments, such as the frequency and timing of interest rates resetting, the frequency of payment and the discounting factors, or when hedging derivatives have a non-zero fair value at inception date of the hedging relationship. Credit valuation adjustments applied to hedging derivatives are also sources of ineffectiveness.

Cumulated changes in fair value related to discontinued cash flow hedge relationships, previously recognised in equity and included in the 2018 profit and loss account were not material, whether the hedged item ceased to exist or not.

3.d Net gain on financial instruments at fair value through equity and on financial assets at amortised cost

In millions of euros	Year to 31 Dec. 2018 IFRS 9 & IFRS 15	Year to 31 Dec. 2017 IAS 39
Net gain on debt instruments at fair value through equity	**213**	**325**
Debt securities (1)	213	325
Net gain on equity instruments at fair value through equity	**102**	**1,386**
Dividend income	102	373
Additions to impairment provisions		(268)
Net disposal gains		1,281
Net gain on financial instruments at fair value through equity	**315**	**1,711**
Net gain on financial instruments at amortised cost	**(5)**	**55**
Loans and receivables	(5)	55
Debt securities (1)	-	-
Net gain on financial assets at amortised cost	**(5)**	**55**

(1) Interest income from debt instruments is included in "Net interest income" (note 3.a), and impairment losses related to potential issuer default are included in "Cost of risk" (note 3.h).

For the year ended 31 December 2018, net gain on financial instruments at fair value through equity includes gains and losses from disposals of debt securities at fair value through equity and dividends on equity securities for which the Group applied the fair value through equity option; gains and losses on the latter are no longer recognised in profit and loss, but directly in equity.

For the year ended 31 December 2017, additions to impairment provisions and gains and losses from disposals of equity securities were those recognised under IAS 39 on available-for-sale securities.

Unrealised gains and losses on debt securities previously recorded under "Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss" and included in the pre-tax income, amount to a gain of EUR 110 million for the year ended 31 December 2018.

3.e NET INCOME FROM INSURANCE ACTIVITIES

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Gross premiums	27,026	24,964
Net gain from investment contracts with discretionary participation feature and other services	29	19
Net income / (expense) from financial investments	(2,133)	9,031
Technical charges related to contracts	(18,487)	(28,130)
Net charges from ceded reinsurance	(267)	(57)
Policy benefit expenses	(2,104)	(2,014)
Net income from insurance activities	**4,064**	**3,813**

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Net gain on available-for-sale financial assets	3,501	3,656
Interest income and dividends	*3,109*	*3,299*
Additions to impairment provisions	*(33)*	*(39)*
Net disposal gains	*425*	*396*
Net gain on financial instruments at fair value through profit or loss	(6,002)	4,998
Net gain on financial instruments at amortised cost	213	328
Investment property income/expense	155	135
Share of earnings of equity-method investments	7	-
Other income/expense	(7)	(86)
Net income / (expense) from financial investments	**(2,133)**	**9,031**

3.f NET INCOME FROM OTHER ACTIVITIES

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*			Year to 31 Dec. 2017 *IAS 39*		
	Income	Expense	Net	Income	Expense	Net
Net income from investment property	165	(69)	96	126	(41)	85
Net income from assets held under operating leases	9,845	(8,406)	1,439	8,823	(7,472)	1,351
Net income from property development activities	898	(676)	222	976	(827)	149
Other net income	1,416	(1,108)	308	1,772	(1,742)	30
Total net income from other activities	**12,324**	**(10,259)**	**2,065**	**11,697**	**(10,082)**	**1,615**

3.g OTHER OPERATING EXPENSES

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
External services and other operating expenses	(10,498)	(10,017)
Taxes and contributions [1]	(1,792)	(1,712)
Total other operating expenses	**(12,290)**	**(11,729)**

[1] Contributions to European resolution funds, including exceptional contributions, amount to EUR 607 million for the year ended 31 December 2018 compared with EUR 502 million for the year ended 31 December 2017.

3.h COST OF RISK

The group general model for impairment described in note 1.e.5 used by the Group relies on the following two steps:

- Assessing whether there has been a significant increase in credit risk since initial recognition, and
- Measuring impairment allowance as either 12-month expected credit losses or lifetime expected credit losses.

Both steps shall rely on forward looking information.

Significant increase in credit risk

The assessment of increase in credit risk is done at instrument level based on indicators and thresholds that vary depending on the nature of the exposure and the type of the counterparty.

The internal credit rating methodology used by the Group is described in chapter 5. Pillar 3 of the Registration document (section 5.4 Credit risk).

- *Wholesale (Corporates / Financial institutions / Sovereigns) and bonds*

The indicator used for assessing increase in credit risk is the internal counterparty rating of the obligor of the facility.

The deterioration in credit quality is considered significant, and the facility is therefore placed in stage 2, if the difference between the counterparty rating at origination and the one as at the reporting date is equal or superior to 3 notches (for instance, a downgrade from 4- to 5-).

The low risk expedient permitted by IFRS 9 (i.e. whereby bonds with an investment grade rating at reporting date are considered as stage 1, and bonds with a non-investment grade rating at reporting date are considered as stage 2) is used only for debt securities for which no ratings are available at acquisition date .

- *SME Corporates facilities and Retail*

As far as SME Corporates exposures are concerned, the indicator used for assessing increase in credit risk is also the internal counterparty rating of the obligor of the facility. Due to a higher volatility in the rating system applied, deterioration is considered significant, and the facility is therefore placed in stage 2, if the difference between the counterparty rating at origination and the one as at the reporting date is equal or superior to 6 notches.

For retail exposures, two alternative risk indicators of increase in credit risk can be taken into consideration:

- Probability of default (PD): Changes in the 1-year probability of default are considered as a reasonable approximation of changes in the lifetime probability of default. Deterioration in credit quality is considered significant, and the facility is therefore placed in stage 2, if the ratio (1-year PD at the reporting date / 1-year PD at origination) is higher than 4.
- Existence of a past due within the last 12 months: in the consumer credit specialised business, the existence of a past due that has occurred within the last 12 months, even if regularised since, is considered as a significant deterioration in credit risk and the facility is therefore placed into stage 2.

Furthermore, for all portfolios (except consumer credit specialised business):

- The facility is assumed to be in stage 1 when its rating is better than or equal to 4- (or its 1-year PD is below or equal to 0.25%) at reporting date, since changes in PD related to downgrades in this zone are less material, and therefore not considered as “significant”.

- When the rating is worse than or equal to 9+ (or the 1 year PD is above 10%) at reporting date considering the Group's practice in terms of credit origination, it is considered as significantly deteriorated and therefore placed into stage 2 (as long as the facility is not credit-impaired).

As a backstop, when an asset becomes 30 days past due, the credit risk is deemed to have increased significantly since initial recognition and the asset is therefore placed into stage 2.

Forward Looking Information

The Group considers forward-looking information both when assessing significant increase in credit risk and when measuring Expected Credit Losses (ECL).

Regarding the assessment of significant increase in credit risk, beyond the rules based on the comparison of risk parameters between initial recognition and reporting date (cf. "significant increase in credit risk" section), the determination of significant increase in credit risk is supplemented by the consideration of more systemic forward looking factors (such as macro-economic, sectorial or geographical risk drivers) that could increase the credit risk of some exposures. These factors can lead to tighten the transfer criteria into stage 2, resulting in an increase of ECL amounts for exposures deemed vulnerable to these risk drivers.

Regarding the measurement of expected credit losses, the Group has made the choice to use 3 macroeconomic scenarios by geographic area covering a wide range of potential future economic conditions:

- a baseline scenario, consistent with the scenario used for budgeting,
- an adverse scenario, corresponding to the scenario used quarterly in Group stress tests,
- a favourable scenario, allowing to capture situations where the economy performs better than anticipated.

The link between the macro-economic scenarios and the ECL measurement is mainly achieved through a modelling of internal rating (or risk parameter) migration matrices. The probabilities of default determined according to these scenarios are used to measure expected credit losses in each of these situations.

The weighting of the expected credit losses under each scenario is performed as follows:

- 50% for the baseline scenario,
- The weighting of the two alternative scenarios is computed using a relationship with the position in the credit cycle. In this approach, the adverse scenario receives a higher weight when the economy is in strong expansion than in lower growth period in anticipation of a potential downturn of the economy.

In addition, when appropriate, the ECL measurement can take into account scenarios of sale of the assets.

Macro-economic scenarios:

The three macroeconomic scenarios correspond to:

- A baseline scenario which describes the most likely path of the economy over the projection horizon. This scenario is updated on a quarterly basis. It is designed by Group Economic Research in collaboration with various experts within the Group. Projections are provided for key markets of the Group, through main macro-economic variables (GDP and its components, unemployment rate, consumer prices, interest rates, foreign exchange rates, oil prices, real estate prices...) which are drivers for risk parameter models used downstream in the credit stress testing process;
- An adverse scenario which describes the impact of the materialisation of some of the risks weighing on the baseline scenario, resulting in a much less favourable economic path. The starting point is a shock on GDP. This shock on GDP is applied with variable magnitudes, but simultaneously among economies when the crisis considered is a global contemporaneous crisis. These assumptions are broadly consistent with those proposed by the regulators. Other variables (unemployment, inflation, interest rate) are deducted on the basis of econometric relationships and expert judgment.

- A favourable scenario which reflects the impact of the materialisation of some of the upside risks for the economy, resulting in a much more favourable economic path. To achieve an unbiased estimation of provisions, the favourable scenario is designed in such a way that the probability of the shock on GDP growth (on average over the cycle) is equal to the probability of the corresponding shock in the adverse scenario. The magnitude of favourable GDP shocks generally corresponds to 80%-95% of the magnitude of adverse GDP shocks. Other variables (unemployment, inflation, interest rate) are deducted in the same way as in the adverse scenario.

- **Cost of credit risk for the period**

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Net allowances to impairment	(2,490)	(2,852)
Recoveries on loans and receivables previously written off	483	537
Losses on irrecoverable loans	(757)	(592)
Total cost of risk for the period	**(2,764)**	**(2,907)**

Cost of risk for the period by accounting categories and asset type

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Cash and balances at central banks	(5)	-
Financial instruments at fair value through profit or loss	(32)	13
Financial assets at fair value through equity [(1)]	(12)	(101)
Financial assets at amortised cost	(2,690)	(2,792)
Loans and receivables[(2)]	(2,648)	(2,852)
Debt securities[(3)]	(42)	60
Other assets	(5)	(9)
Financing and guarantee commitments and other items	(20)	(18)
Total cost of risk for the period	**(2,764)**	**(2,907)**
Cost of risk on unimpaired assets and commitments	195	182
of which stage 1	*(155)*	
of which stage 2	*350*	
Cost of risk on impaired assets and commitments - stage 3	(2,959)	(3,089)

[(1)]2017 figures represent the cost of risk related to fixed-income available-for-sale financial assets.

[(2)]2017 figures represent the cost of risk related to loans and advances to credit institutions and customers.

[(3)]2017 figures represent the cost of risk related to securities classified in loans and receivables and to held-to-maturity financial assets.

- **Credit risk impairment**

Change in impairment by accounting category and asset type during the period

In millions of euros,	1 January 2018 IFRS 9 & IFRS 15	Net allowance to impairment	Impairment provisions used	Effect of exchange rate movements and other	31 December 2018 IFRS 9 & IFRS 15
Assets impairment					
Amounts due from central banks	13	5	-	(3)	15
Financial instruments at fair value through profit or loss	190	(41)	-	42	191
Impairment of assets at fair value through equity	131	12	(1)	(2)	140
Financial assets at amotised cost	27,658	2,527	(5,637)	(186)	24,362
Loans and receivables	*27,556*	*2,489*	*(5,626)*	*(187)*	*24,232*
Debt securities	*102*	*38*	*(11)*	*1*	*130*
Other assets	75	4	(1)	2	80
Total impairment of financial assets	**28,067**	**2,507**	**(5,639)**	**(147)**	**24,788**
of which stage 1	*1,477*	*145*	*(2)*	*(39)*	*1,581*
of which stage 2	*3,707*	*(291)*	*(12)*	*(79)*	*3,325*
of which stage 3	*22,883*	*2,653*	*(5,625)*	*(29)*	*19,882*
Provisions recognised as liabilities					
Provisions for commitments	763	(9)	(66)	87	775
Other provisions	514	(8)	(50)	(39)	417
Total provisions recognised for credit commitments	**1,277**	**(17)**	**(116)**	**48**	**1,192**
of which stage 1	*201*	*10*	*(1)*	*27*	*237*
of which stage 2	*265*	*(49)*	-	*4*	*220*
of which stage 3	*811*	*22*	*(115)*	*17*	*735*
Total impairment and provisions	**29,344**	**2,490**	**(5,755)**	**(99)**	**25,980**

Change in impairment of amortised cost financial assets during the period

In millions of euros *IFRS 9 & IFRS 15*	Impairment on assets subject to 12-month Expected Credit Losses (Stage 1)	Impairment on assets subject to lifetime Expected Credit Losses (Stage 2)	Impairment on doubtful assets (Stage 3)	Total
At 1 January 2018	**1,445**	**3,691**	**22,522**	**27,658**
Net allowance to impairment	**142**	**(300)**	**2,685**	**2,527**
Financial assets purchased or originated during the period	578	348		926
Financial assets derecognised during the period [(1)]	(179)	(278)	(334)	(791)
Transfer to stage 2	(133)	1,687	(415)	1,139
Transfer to stage 3	(68)	(676)	2,104	1,360
Transfer to stage 1	111	(667)	(98)	(654)
Other allowances / reversals without stage transfer [(2)]	(167)	(714)	1,428	547
Impairment provisions used	**(2)**	**(12)**	**(5,623)**	**(5,637)**
Effect of exchange rate movements and other items	**(36)**	**(77)**	**(73)**	**(186)**
At 31 December 2018	**1,549**	**3,302**	**19,511**	**24,362**

[(1)] including disposals

[(2)] including amortisation

3.i CORPORATE INCOME TAX

Reconciliation of the effective tax expense to the theoretical tax expense at standard tax rate in France	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*		Year to 31 Dec. 2017 *IAS 39*	
	in millions of euros	tax rate	in millions of euros	tax rate
Corporate income tax expense on pre-tax income at standard tax rate in France [(1)]	**(3,280)**	**34.4%**	**(3,718)**	**34.4%**
Impact of differently taxed foreign profits	456	-4.8%	333	-3.1%
Impact of changes in tax rates	-	-	(486)	4.5%
Impact of the securities taxation	362	-3.8%	427	-4.0%
Impact of the non-deductibility of taxes and bank levies [(2)]	(209)	2.2%	(196)	1.8%
Impact of previously unrecognised deferred taxes (tax losses and temporary differences)	86	-0.9%	449	-4.2%
Impact of using tax losses for which no deferred tax asset was previously recognised	-	-	6	-
Other items	382	-4.0%	82	-0.7%
Corporate income tax expense	**(2,203)**	**23.1%**	**(3,103)**	**28.7%**
Current tax expense for the year to 31 December	*(1,691)*		*(1,989)*	
Deferred tax expense for the year to 31 December (note 5.k)	*(512)*		*(1,114)*	

(1) Restated for the share of profits in equity-method entities and goodwill impairment.

(2) Contribution to the Single Resolution Fund and non-deductible systemic bank levies.

4. SEGMENT INFORMATION

The Group is composed of two operating divisions:

- Retail Banking and Services, which covers Domestic Markets and International Financial Services. Domestic Markets include retail banking networks in France (FRB), Italy (BNL banca commerciale), Belgium (BRB), and Luxembourg (LRB), as well as certain specialised retail banking divisions (Personal Investors, Leasing Solutions, Arval and New Digital Businesses). International Financial Services is composed of all BNP Paribas Group retail banking businesses out of the Eurozone, split between Europe Mediterranean and BancWest in the United States, as well as Personal Finance and the Insurance and Wealth and Asset Management activities (Wealth Management, Asset Management and Real Estate);
- Corporate and Institutional Banking (CIB), which includes Corporate Banking (Europe, Middle East, Africa, Asia, Americas, and Corporate Finance activities), Global Markets (Fixed Income, Currency and Commodities, as well as Equity and Prime Services), and Securities Services to management companies, financial institutions and other corporations.

Other activities mainly include Principal Investments, activities related to the Group's central treasury function, some costs related to cross-business projects, the residential mortgage lending business of Personal Finance (a significant part of which is managed in run-off), and certain investments.

They also include non-recurring items resulting from applying the rules on business combinations. In order to provide consistent and relevant economic information for each core business, the impact of amortising fair value adjustments recognised in the net equity of entities acquired and restructuring costs incurred in respect to the integration of entities, have been allocated to the "Other Activities" segment. The same applies to transformation costs relating to the Group's cross-business savings programmes.

Inter-segment transactions are conducted at arm's length. The segment information presented comprises agreed inter-segment transfer prices.

The capital allocation is carried out on the basis of risk exposure, taking into account various conventions relating primarily to the capital requirement of the business as derived from the risk-weighted asset calculations required under capital adequacy rules. Normalised equity income by segment is determined by attributing to each segment the income of its allocated equity. The equity allocation to segments is based on 11% of weighted assets. The breakdown of balance sheet by core business follows the same rules as the breakdown of the profit or loss by core business.

- **Income by business segment**

In millions of euros	Year to 31 Dec. 2018 IFRS 9 & IFRS 15						Year to 31 Dec. 2017 IAS 39					
	Revenues	Operating expenses	Cost of risk	Operating income	Non-operating items	Pre-tax income	Revenues	Operating expenses	Cost of risk	Operating income	Non-operating items	Pre-tax income
Retail Banking & Services												
Domestic Markets												
French Retail Banking (1)	**6,035**	(4,463)	(286)	**1,285**	(1)	**1,284**	**6,071**	(4,510)	(331)	**1,231**		**1,231**
BNL banca commerciale (1)	**2,704**	(1,752)	(593)	**359**	(3)	**356**	**2,822**	(1,761)	(870)	**191**	1	**192**
Belgian Retail Banking (1)	**3,422**	(2,418)	(42)	**961**	18	**980**	**3,499**	(2,451)	(64)	**985**	28	**1,013**
Other Domestic Markets activities (1)	**2,972**	(1,768)	(123)	**1,081**	(17)	**1,064**	**2,772**	(1,601)	(89)	**1,082**	42	**1,124**
International Financial Services												
Personal Finance	**5,533**	(2,764)	(1,186)	**1,583**	64	**1,646**	**4,923**	(2,427)	(1,009)	**1,487**	120	**1,607**
International Retail Banking												
Europe-Mediterranean (1)	**2,351**	(1,600)	(308)	**443**	241	**684**	**2,329**	(1,656)	(259)	**414**	202	**616**
BancWest (1)	**2,585**	(1,836)	(82)	**667**	152	**819**	**2,939**	(2,001)	(111)	**827**	3	**830**
Insurance	**2,680**	(1,406)	3	**1,276**	203	**1,479**	**2,514**	(1,251)	4	**1,267**	600	**1,867**
Wealth and Asset Management	**3,286**	(2,636)	(6)	**644**	37	**681**	**3,193**	(2,387)	24	**831**	68	**899**
Corporate & Institutional Banking												
Corporate Banking	**3,951**	(2,507)	(31)	**1,413**	57	**1,470**	**4,165**	(2,430)	(70)	**1,665**	37	**1,703**
Global Markets	**4,727**	(3,937)	(19)	**771**	1	**772**	**5,584**	(4,255)	(15)	**1,315**	6	**1,321**
Securities Services	**2,152**	(1,719)	7	**439**		**439**	**1,955**	(1,588)	3	**369**	1	**371**
Other Activities	**120**	(1,776)	(97)	**(1,753)**	287	**(1,466)**	**394**	(1,627)	(121)	**(1,355)**	(110)	**(1,464)**
Total Group	**42,516**	**(30,583)**	**(2,764)**	**9,169**	**1,039**	**10,208**	**43,161**	**(29,944)**	**(2,907)**	**10,310**	**1,000**	**11,310**

(1) French Retail Banking, BNL banca commerciale, Belgian Retail Banking, Luxembourg Retail Banking, Europe-Mediterranean and BancWest after the reallocation within Wealth and Asset Management of one-third of the Wealth Management activities in France, Italy, Belgium, Luxembourg, Germany, Turkey and the United States.

- **Net commission income by business segment, including fees accounted for under « Net income from insurance activities »**

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Retail Banking & Services		
Domestic Markets		
French Retail Banking [1]	2,573	2,585
BNL banca commerciale [1]	1,038	1,037
Belgian Retail Banking [1]	801	838
Other Domestic Markets activities [1]	362	340
International Financial Services		
Personal Finance	736	692
International Retail Banking	936	1,022
Europe Mediterranean [1]	*510*	*530*
BancWest [1]	*427*	*492*
Insurance	(3,400)	(3,309)
Wealth and Asset Management	2,192	2,113
Corporate & Institutional Banking		
Corporate Banking	1,441	1,410
Global Markets	(718)	(531)
Securities Services	1,240	1,202
Other activities	8	53
Total Group	**7,208**	**7,454**

[1] French Retail Banking, BNL banca commerciale, Belgian Retail Banking, Luxembourg Retail Banking, Europe-Mediterranean and BancWest after the reallocation within Wealth and Asset Management of one-third of the Wealth Management activities in France, Italy, Belgium, Luxembourg, Germany, Turkey and the United States.

- **Assets and liabilities by business segment**

In millions of euros	31 December 2018 IFRS 9 & IFRS 15		1 January 2018 IFRS 9 & IFRS 15	
	Asset	Liability	Asset	Liability
Retail Banking & Services				
Domestic Markets	**465,519**	**472,763**	**456,178**	**459,449**
French Retail Banking	193,865	188,781	191,577	183,132
BNL banca commerciale	80,709	65,844	78,714	65,606
Belgian Retail Banking	133,540	162,186	131,772	157,339
Other Domestic Markets activities	57,405	55,952	54,115	53,372
International Financial Services	**475,517**	**420,869**	**469,038**	**423,553**
Personal Finance	86,178	18,675	77,505	22,871
International Retail Banking	129,455	116,373	137,040	123,279
Europe-Mediterranean	*57,674*	*51,712*	*50,833*	*46,213*
BancWest	*71,781*	*64,661*	*86,207*	*77,066*
Insurance	232,308	222,021	227,712	219,249
Wealth and Asset Management	27,576	63,800	26,781	58,154
Corporate and Institutional Banking	**816,190**	**907,655**	**751,132**	**829,780**
Other Activities	**283,610**	**239,549**	**273,430**	**236,996**
Total Group	**2,040,836**	**2,040,836**	**1,949,778**	**1,949,778**

Information by business segment relating to goodwill is presented in note 5.o Goodwill.

- **Information by geographic area**

The geographic split of segment results, assets and liabilities is based on the region in which they are recognised for accounting purposes, adjusted as per the managerial origin of the business activity. It does not necessarily reflect the counterparty's nationality or the location of operational businesses.

- Revenues by geographic area

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Europe	31,699	31,659
North America	4,654	5,041
Asia & Pacific	3,000	3,203
Others	3,163	3,258
Total Group	**42,516**	**43,161**

- Assets and liabilities, in contribution to the consolidated accounts, by geographic area

In millions of euros	31 December 2018 *IFRS 9 et IFRS 15*	1 January 2018 *IFRS 9 et IFRS 15*
Europe	1,618,039	1,557,956
North America	246,419	219,830
Asia & Pacific	126,595	120,368
Others	49,783	51,624
Total Group	**2,040,836**	**1,949,778**

5. NOTES TO THE BALANCE SHEET AT 31 DECEMBER 2018

5.a FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets and financial liabilities at fair value through profit or loss consist of held-for-trading transactions - including derivatives -, of certain liabilities designated by the Group as at fair value through profit or loss at the time of issuance and of non-trading instruments whose characteristics prevent their accounting at amortised cost or at fair value through equity.

In millions of euros	31 December 2018 IFRS 9 & IFRS 15				1 January 2018 IFRS 9 & IFRS 15			
	Trading book	Financial instruments designated as at fair value through profit or loss	Other financial assets at fair value through profit or loss	Total	Trading book	Financial instruments designated as at fair value through profit or loss	Other financial assets at fair value through profit or loss	Total
Securities	114,615		7,339	121,954	122,494		7,832	130,326
Loans and repurchase agreements	182,463		1,253	183,716	143,765		1,183	144,948
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	**297,078**	**-**	**8,592**	**305,670**	**266,259**	**-**	**9,015**	**275,274**
Securities	75,189			75,189	67,087			67,087
Deposits and repurchase agreements	201,705	2,334		204,039	172,147	2,498		174,645
Issued debt securities (note 5.h)		54,908		54,908		50,490		50,490
of which subordinated debt		*787*		*787*		*836*		*836*
of which non subordinated debt		*48,964*		*48,964*		*47,034*		*47,034*
of which debt representative of shares of consolidated funds held by third parties		*5,157*		*5,157*		*2,620*		*2,620*
FINANCIAL LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS	**276,894**	**57,242**		**334,136**	**239,234**	**52,988**		**292,222**

Detail of these assets and liabilities is provided in note 5.d.

- **Financial liabilities designated as at fair value through profit or loss**

Financial liabilities at fair value through profit or loss mainly consist of debt securities in issue, originated and structured on behalf of customers, where the risk exposure is managed in combination with the hedging strategy. These types of debt securities in issue contain significant embedded derivatives, whose changes in value may be compensated by changes in the value of economic hedging derivatives.

The redemption value of debt issued and designated as at fair value through profit or loss at 31 December 2018 was EUR 56,435 million (EUR 49,919 million at 1 January 2018).

- **Other financial assets measured at fair value through profit or loss**

Other financial assets at fair value through profit or loss are financial assets not held for trading:

- Debt instruments that do not meet the criteria defined by IFRS 9 to be classified as financial instruments at "fair value through equity" or at "amortised cost":
  - Their business model is not to "collect contractual cash flows" nor "collect contractual cash flows and sell the instruments"; and/or
  - Their cash flows are not solely repayments of principal and interest on the principal amount outstanding.
- Equity instruments that the Group did not choose to classify as at "fair value through equity".

DERIVATIVE FINANCIAL INSTRUMENTS

The majority of derivative financial instruments held for trading are related to transactions initiated for trading purposes. They may result from market-making or arbitrage activities. BNP Paribas actively trades in derivatives. Transactions include trades in "ordinary" instruments such as credit default swaps, and structured transactions with complex risk profiles tailored to meet the needs of its customers. The net position is in all cases subject to limits.

Some derivative instruments are also contracted to hedge financial assets or financial liabilities for which the Group has not documented a hedging relationship, or which do not qualify for hedge accounting under IFRS.

	31 December 2018 *IFRS 9 & IFRS 15*		1 January 2018 *IFRS 9 & IFRS 15*	
In millions of euros	Positive market value	Negative market value	Positive market value	Negative market value
Interest rate derivatives	116,438	103,452	122,110	110,804
Foreign exchange derivatives	69,514	68,761	66,550	65,269
Credit derivatives	6,873	7,071	7,553	8,221
Equity derivatives	33,424	39,419	28,797	39,150
Other derivatives	6,646	7,101	4,886	4,200
Derivative financial instruments	**232,895**	**225,804**	**229,896**	**227,644**

The table below shows the total notional amount of trading derivatives. The notional amounts of derivative instruments are merely an indication of the volume of the Group's activities in financial instruments markets, and do not reflect the market risks associated with such instruments.

	31 December 2018 *IFRS 9 & IFRS 15*				1 January 2018 *IFRS 9 & IFRS 15*			
In millions of euros	Exchange-traded	Over-the-counter, cleared through central clearing houses	Over-the-counter	Total	Exchange-traded	Over-the-counter, cleared through central clearing houses	Over-the-counter	Total
Interest rate derivatives	1,553,933	9,189,930	5,193,522	15,937,385	1,398,333	9,348,490	4,913,384	15,660,207
Foreign exchange derivatives	15,547	52,329	4,782,027	4,849,903	1,809	48,028	4,631,422	4,681,259
Credit derivatives		311,726	561,534	873,260		288,459	557,572	846,031
Equity derivatives	1,132,800	1,789	577,816	1,712,405	856,023	940	590,719	1,447,682
Other derivatives	99,510	58,004	94,202	251,716	86,262	26,470	79,264	191,996
Derivative financial instruments	**2,801,790**	**9,613,778**	**11,209,101**	**23,624,669**	**2,342,427**	**9,712,387**	**10,772,361**	**22,827,175**

5.b DERIVATIVES USED FOR HEDGING PURPOSES

The table below shows the notional amounts and the fair value of derivatives used for hedging purposes.

In millions of euros	31 December 2018 IFRS 9 & IFRS 15			1 January 2018 IFRS 9 & IFRS 15		
	Notional amounts	Positive fair value	Negative fair value	Notional amounts	Positive fair value	Negative fair value
Fair value hedges	**639,707**	**8,079**	**10,706**	**723,687**	**11,632**	**14,542**
Interest rate derivatives	630,993	7,871	10,526	713,066	11,454	14,311
Foreign exchange derivatives	8,714	208	180	10,621	178	231
Cash flow hedges	**184,287**	**1,683**	**964**	**207,655**	**2,081**	**1,101**
Interest rate derivatives	58,666	1,233	358	97,865	1,551	449
Foreign exchange derivatives	125,306	439	496	109,489	472	646
Other derivatives	315	11	110	301	58	6
Net foreign investment hedges	**3,806**	**48**	**7**	**4,556**	**8**	**39**
Foreign exchange derivatives	3,806	48	7	4,556	8	39
Derivatives used for hedging purposes	**827,800**	**9,810**	**11,677**	**935,898**	**13,721**	**15,682**

Interest rate risk and foreign exchange risk management strategies are described in Chapter 5 – Pillar 3 of the registration document (section 5.7 – Market risk – Market risk related to banking activities). Quantitative information related to foreign currency borrowings used for net investment hedges is also mentioned in this chapter.

The table below presents the detail of fair value hedge relationships for identified financial instruments and portfolios of financial instruments that are continuing as at 31 December 2018:

	Hedging instruments				Hedged instruments			
In millions of euros, as at 31 December 2018	Notional amounts	Positive fair value	Negative fair value	Cumulated changes in fair value used as the basis for recognising ineffective-ness	Carrying amount - asset	Cumulated changes in fair value - asset	Carrying amount - liability	Cumulated changes in fair value - liability
Fair value hedges of identified instruments	203,795	3,150	5,702	(1,152)	94,412	3,131	91,100	2,323
Interest rate derivatives hedging the interest rate risk related to	**196,753**	**3,070**	**5,543**	**(1,214)**	**93,045**	**3,116**	**85,948**	**2,253**
Loans and receivables	27,345	82	427	(385)	24,727	415	-	-
Securities	68,129	765	5,006	(2,843)	68,318	2,701	-	-
Deposits	16,155	831	18	823	-	-	16,327	820
Debt securities	85,124	1,392	92	1,191	-	-	69,621	1,433
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**7,042**	**80**	**159**	**62**	**1,367**	**15**	**5,152**	**70**
Loans and receivables	1,270	125	12	(6)	1,270	12	-	-
Securities	100	1	6	(3)	97	3	-	-
Deposits	626	(16)	-	20	-	-	465	17
Debt securities	5,046	(30)	141	51	-	-	4,687	53
Interest-rate risk hedged portfolios	435,912	4,929	5,004	(419)	90,299	2,781	154,412	2,458
Interest rate derivatives hedging the interest rate risk related to [(1)]	**434,240**	**4,801**	**4,983**	**(429)**	**88,789**	**2,792**	**154,412**	**2,458**
Loans and receivables	188,047	756	4,259	(2,941)	88,644	2,792	-	-
Securities	148	3	7	(2)	145	-	-	-
Deposits	246,045	4,042	717	2,514	-	-	154,412	2,458
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**1,672**	**128**	**21**	**10**	**1,510**	**(11)**	**-**	**-**
Loans and receivables	1,672	128	21	10	1,510	(11)	-	-
Total fair value hedge	639,707	8,079	10,706	(1,571)	184,711	5,912	245,512	4,781

[(1)] Are included in this section the notional amounts of hedging derivatives and of swaps that reverse the interest rate positions, thus reducing the hedge relationship, when the hedged item still exists, for respectively EUR 75,126 million for derivatives hedging loans and receivables and EUR 61,689 million for derivatives hedging deposits.

An asset or a liability or set of assets and liabilities, can be hedged over several periods of time with different derivative financial instruments. Besides, some hedges are achieved by the combination of two derivative instruments (for example, to exchange the variable rate index of the first instrument from Euribor to Eonia). In this case, the notional amounts add up and their total amount is higher than the hedged amount. The first situation is observed more particularly for interest-rate risk hedged portfolios and the second for hedges of issued debt securities.

As regards discontinued fair value hedge relationships where the derivative contract was terminated, the cumulated amount of hedging instrument revaluation remaining to be amortised over the residual life of the hedged instruments amounts to EUR 6 million in assets as at 31 December 2018, and to EUR 12 million in liabilities, for hedges of portfolios of financial instruments.

The notional amount of cash flow hedge derivatives is EUR 184,287 million as at 31 December 2018. Changes in assets and liabilities recognised directly in equity amount to EUR 1,073 million.

The table below presents the nominal amounts of hedging derivatives by maturity:

In millions of euros, as at 31 December 2018	Maturity date			
	Less than 1 year	Between 1 and 5 years	Over 5 years	Total
Fair value hedges	**121,642**	**327,622**	**190,443**	**639,707**
Interest rate derivatives	118,626	323,278	189,089	630,993
Foreign exchange derivatives	3,016	4,344	1,354	8,714
Cash flow hedges	**121,760**	**44,703**	**17,824**	**184,287**
Interest rate derivatives	8,456	37,884	12,326	58,666
Foreign exchange derivatives	113,165	6,643	5,498	125,306
Other derivatives	139	176		315
Net foreign investment hedges	**1,369**	**2,437**	**-**	**3,806**
Foreign exchange derivatives	1,369	2,437		3,806

5.c FINANCIAL ASSETS AT FAIR VALUE THROUGH EQUITY

In millions of euros	31 December 2018 IFRS 9 & IFRS 15		1 January 2018 IFRS 9 & IFRS 15	
	Net	of which changes in value taken directly to equity	Net	of which changes in value taken directly to equity
Debt securities	**53,838**	**77**	**53,942**	**584**
Governments	32,818	243	28,649	549
Other public administrations	14,340	(74)	18,615	63
Credit institutions	4,149	(83)	4,099	(56)
Others	2,531	(9)	2,579	28
Equity securities	**2,151**	**451**	**2,330**	**599**
Total financial assets at fair value through equity	**55,989**	**528**	**56,272**	**1,183**

Debt securities at fair value through equity include EUR 114 million classified as stage 3 at 31 December 2018 (unchanged compared to 1 January 2018). For these securities, the credit impairment recognised in the profit and loss account has been charged to the negative changes in value recognized in equity for EUR 112 million at 31 December 2018 (EUR 108 million at 1 January 2018).

The option to recognise certain equity instruments at fair value through equity was retained in particular for shares held through strategic partnerships and shares that the Group is required to hold in order to carry out certain activities.

During the year ended 31 December 2018, the Group sold several equity securities measured at fair value through equity. However, the gains and losses thus reclassified into retained earnings were immaterial. No dividend related to these securities was recognised in the profit and loss account during the year ended 31 December 2018.

Changes in value taken directly to equity are detailed as follows:

In millions of euros	31 December 2018 IFRS 9 & IFRS 15			1 January 2018 IFRS 9 & IFRS 15		
	Debt securities	Equity securities	Total	Debt securities	Equity securities	Total
Non-hedged changes in value of securities, recognised in "Financial assets at fair value through equity"	**77**	**451**	**528**	**584**	**599**	**1,183**
Deferred tax linked to these changes in value	(46)	(34)	(80)	(192)	(36)	(228)
Group share of changes in value of financial assets at fair value through equity owned by equity-method entities, after deferred tax	39	1	40	62		62
Expected credit loss recognised in profit or loss	140		140	130		130
Changes in value of non-current assets held for sale recognised directly in equity, after deferred tax	6		6			
Other variations	(10)		(10)	1		1
Changes in value of assets taken directly to equity under the heading "Financial assets at fair value through equity"	**206**	**418**	**624**	**585**	**563**	**1,148**
Attributable to equity shareholders	201	403	604	589	561	1,150
Attributable to minority interests	5	15	20	(4)	2	(2)

5.d MEASUREMENT OF THE FAIR VALUE OF FINANCIAL INSTRUMENTS

VALUATION PROCESS

BNP Paribas has retained the fundamental principle that it should have a unique and integrated processing chain for producing and controlling the valuations of financial instruments that are used for the purpose of daily risk management and financial reporting. All these processes are based on a common economic valuation which is a core component of business decisions and risk management strategies.

Economic value is composed of mid-market value, to which add valuation adjustments.

Mid-market value is derived from external data or valuation techniques that maximise the use of observable and market-based data. Mid-market value is a theoretical additive value which does not take account of i) the direction of the transaction or its impact on the existing risks in the portfolio, ii) the nature of the counterparties, and iii) the aversion of a market participant to particular risks inherent in the instrument, the market in which it is traded, or the risk management strategy.

Valuation adjustments take into account valuation uncertainty and include market and credit risk premiums to reflect costs that could be incurred in case of an exit transaction in the principal market. When valuation techniques are used for the purpose of deriving fair value, funding assumptions related to the future expected cash flows are an integral part of the mid-market valuation, notably through the use of appropriate discount rates. These assumptions reflect what the Bank anticipates as being the effective funding conditions of the instrument that a market participant would consider. This notably takes into account the existence and terms of any collateral agreement. In particular, for non- or imperfectly collateralized derivative instruments, they include an explicit adjustment to the interbank interest rate (Funding Valuation Adjustment – FVA).

Fair value generally equals the economic value, subject to limited adjustments, such as own credit adjustments, which are specifically required by IFRS standards.

The main valuation adjustments are presented in the section below.

VALUATION ADJUSTMENTS

Valuation adjustments retained by BNP Paribas for determining fair values are as follows:

Bid/offer adjustments: the bid/offer range reflects the additional exit cost for a price taker and symmetrically the compensation sought by dealers to bear the risk of holding the position or closing it out by accepting another dealer's price.

BNP Paribas assumes that the best estimate of an exit price is the bid or offer price, unless there is evidence that another point in the bid/offer range would provide a more representative exit price.

Input uncertainty adjustments: when the observation of prices or data inputs required by valuation techniques is difficult or irregular, an uncertainty exists on the exit price. There are several ways to gauge the degree of uncertainty on the exit price such as measuring the dispersion of the available price indications or estimating the possible ranges of the inputs to a valuation technique.

Model uncertainty adjustments: these relate to situations where valuation uncertainty is due to the valuation technique used, even though observable inputs might be available. This situation arises when the risks inherent in the instruments are different from those available in the observable data, and therefore the valuation technique involves assumptions that cannot be easily corroborated.

Credit valuation adjustment (CVA): the CVA adjustment applies to valuations and market quotations whereby the credit worthiness of the counterparty is not reflected. It aims to account for the possibility that the counterparty may default and that BNP Paribas may not receive the full fair value of the transactions.

In determining the cost of exiting or transferring counterparty risk exposures, the relevant market is deemed to be an inter-dealer market. However, the determination of CVA remains judgemental due to i) the possible absence or lack of price discovery in the inter-dealer market, ii) the influence of the regulatory landscape relating to counterparty risk on the market participants' pricing behaviour and iii) the absence of a dominant business model for managing counterparty risk.

The CVA model is grounded on the same exposures as those used for regulatory purposes. The model attempts to estimate the cost of an optimal risk management strategy based on i) implicit incentives and constraints inherent in the regulations in force and their evolutions, ii) market perception of the probability of default and iii) default parameters used for regulatory purposes.

Own-credit valuation adjustment for debts (OCA) and for derivatives (debit valuation adjustment - DVA): OCA and DVA are adjustments reflecting the effect of credit worthiness of BNP Paribas, on respectively the value of debt securities designated as at fair value through profit or loss and derivatives. Both adjustments are based on the expected future liability profiles of such instruments. The own credit worthiness is inferred from the market-based observation of the relevant bond issuance levels. The DVA adjustment is determined after taking into account the Funding Valuation Adjustment (FVA).

Thus, the carrying value of debt securities designated as at fair value though profit or loss is increased by EUR 244 million as at 31 December 2018, compared with an increase in value of EUR 452 million as at 1 January 2018, i.e. a EUR -208 million variation recognised directly in equity that will not be reclassified to profit or loss.

INSTRUMENT CLASSES AND CLASSIFICATION WITHIN THE FAIR VALUE HIERARCHY FOR ASSETS AND LIABILITIES MEASURED AT FAIR VALUE

As explained in the summary of significant accounting policies (note 1.e.10), financial instruments measured at fair value are categorised into a fair value hierarchy consisting of three levels.

The disaggregation of assets and liabilities into risk classes is meant to provide further insight into the nature of the instruments:

- Securitised exposures are further broken down by collateral type.
- For derivatives, fair values are broken down by dominant risk factor, namely interest rate, foreign exchange, credit and equity. Derivatives used for hedging purposes are mainly interest rate derivatives.

In millions of euros	31 December 2018 IFRS 9 & IFRS 15											
	Trading book				Instruments at fair value through profit or loss not held for trading				Financial assets at fair value through equity			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Securities	**89,253**	**25,121**	**241**	**114,615**	**625**	**1,969**	**4,745**	**7,339**	**43,105**	**11,927**	**957**	**55,989**
Governments	41,404	7,733		49,137	3	246		249	29,905	2,913		32,818
Asset Backed Securities	1,584	7,639	6	9,229	-	389	-	389	-	1,104	-	1,104
CDOs / CLOs [(1)]		*92*	*5*	*97*				-				-
Other Asset Backed Securities	*1,584*	*7,547*	*1*	*9,132*		*389*		*389*		*1,104*		*1,104*
Other debt securities	10,696	8,312	142	19,150		796	825	1,621	12,083	7,678	155	19,916
Equities and other equity securities	35,569	1,437	93	37,099	622	538	3,920	5,080	1,117	232	802	2,151
Loans and repurchase agreements	**-**	**182,196**	**267**	**182,463**	**-**	**346**	**907**	**1,253**	**-**	**-**	**-**	**-**
Loans		2,861		2,861		145	907	1,052				
Repurchase agreements		179,335	267	179,602		201		201				
FINANCIAL ASSETS AT FAIR VALUE	**89,253**	**207,317**	**508**	**297,078**	**625**	**2,315**	**5,652**	**8,592**	**43,105**	**11,927**	**957**	**55,989**
Securities	**71,828**	**3,346**	**15**	**75,189**	**-**	**-**	**-**	**-**				
Governments	48,779	631		49,410				-				
Other debt securities	8,394	2,655	11	11,060				-				
Equities and other equity securities	14,655	60	4	14,719				-				
Borrowings and repurchase agreements	**-**	**199,861**	**1,844**	**201,705**	**-**	**1,940**	**394**	**2,334**				
Borrowings		5,408		5,408		1,940	394	2,334				
Repurchase agreements		194,453	1,844	196,297				-				
Issued debt securities *(note 5.h)*	**-**	**-**	**-**	**-**	**4,049**	**36,323**	**14,536**	**54,908**				
Subordinated debt *(note 5.h)*				-		787		787				
Non subordinated debt *(note 5.h)*				-		34,428	14,536	48,964				
Debt representative of shares of consolidated funds held by third parties				-	4,049	1,108		5,157				
FINANCIAL LIABILITIES AT FAIR VALUE	**71,828**	**203,207**	**1,859**	**276,894**	**4,049**	**38,263**	**14,930**	**57,242**				

In millions of euros	1 January 2018 IFRS 9 & IFRS 15											
	Trading book				Instruments at fair value through profit or loss not held for trading				Financial assets at fair value through equity			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Securities	**97,844**	**24,147**	**503**	**122,494**	**713**	**2,417**	**4,702**	**7,832**	**42,697**	**12,726**	**849**	**56,272**
Governments	42,265	7,831		50,096		253		253	26,713	1,935	-	28,648
Asset Backed Securities	-	7,928	97	8,025	-	555	-	555	-	1,386	-	1,386
CDOs / CLOs [(1)]		*495*	*26*	*521*				-				-
Other Asset Backed Securities		*7,433*	*71*	*7,504*		*555*		*555*		*1,386*		*1,386*
Other debt securities	10,293	7,113	223	17,629		1,295	807	2,102	14,695	9,178	35	23,908
Equities and other equity securities	45,286	1,275	183	46,744	713	314	3,895	4,922	1,289	227	814	2,330
Loans and repurchase agreements	**-**	**143,502**	**263**	**143,765**	**-**	**38**	**1,145**	**1,183**	**-**	**-**	**-**	**-**
Loans		2,047		2,047		38	939	977				
Repurchase agreements		141,455	263	141,718			206	206				
FINANCIAL ASSETS AT FAIR VALUE	**97,844**	**167,649**	**766**	**266,259**	**713**	**2,455**	**5,847**	**9,015**	**42,697**	**12,726**	**849**	**56,272**
Securities	**64,714**	**2,286**	**87**	**67,087**	**-**	**-**	**-**	**-**				
Governments	47,421	249		47,670				-				
Other debt securities	6,150	1,979	85	8,214				-				
Equities and other equity securities	11,143	58	2	11,203				-				
Borrowings and repurchase agreements	**-**	**171,082**	**1,065**	**172,147**	**-**	**2,026**	**472**	**2,498**				
Borrowings		4,500		4,500		2,026	472	2,498				
Repurchase agreements		166,582	1,065	167,647				-				
Issued debt securities *(note 5.h)*	**-**	**-**	**-**	**-**	**1,916**	**35,673**	**12,901**	**50,490**				
Subordinated debt *(note 5.h)*						836		836				
Non subordinated debt *(note 5.h)*						34,133	12,901	47,034				
Debt representative of shares of consolidated funds held by third parties					1,916	704		2,620				
FINANCIAL LIABILITIES AT FAIR VALUE	**64,714**	**173,368**	**1,152**	**239,234**	**1,916**	**37,699**	**13,373**	**52,988**				

[(1)] Collateralised Debt Obligations / Collateralised Loan Obligations

In millions of euros	31 December 2018 IFRS 9 & IFRS 15							
	Positive market value				Negative market value			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Interest rate derivatives	158	115,046	1,234	116,438	118	101,967	1,367	103,452
Foreign exchange derivatives	1	69,182	331	69,514	1	68,520	240	68,761
Credit derivatives		6,527	346	6,873		6,616	455	7,071
Equity derivatives	11,724	19,057	2,643	33,424	11,092	22,633	5,694	39,419
Other derivatives	990	5,468	188	6,646	1,133	5,628	340	7,101
Derivative financial instruments not used for hedging purposes	**12,873**	**215,280**	**4,742**	**232,895**	**12,344**	**205,364**	**8,096**	**225,804**
Derivative financial instruments used for hedging purposes	**-**	**9,810**	**-**	**9,810**	**-**	**11,677**	**-**	**11,677**

In millions of euros	1 January 2018 IFRS 9 & IFRS 15							
	Positive market value				Negative market value			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Interest rate derivatives	271	120,184	1,655	122,110	357	109,033	1,414	110,804
Foreign exchange derivatives	1	66,318	231	66,550		64,938	331	65,269
Credit derivatives		7,347	206	7,553		7,622	599	8,221
Equity derivatives	7,781	19,941	1,075	28,797	5,527	27,088	6,535	39,150
Other derivatives	1,046	3,787	53	4,886	673	3,434	93	4,200
Derivative financial instruments not used for hedging purposes	**9,099**	**217,577**	**3,220**	**229,896**	**6,557**	**212,115**	**8,972**	**227,644**
Derivative financial instruments used for hedging purposes	**-**	**13,721**	**-**	**13,721**	**-**	**15,682**	**-**	**15,682**

Transfers between levels may occur when an instrument fulfils the criteria defined, which are generally market and product dependent. The main factors influencing transfers are changes in the observation capabilities, passage of time, and events during the transaction lifetime. The timing of recognising transfers is determined at the beginning of the reporting period.

During the year ended 31 December 2018, transfers between Level 1 and Level 2 were not significant.

DESCRIPTION OF MAIN INSTRUMENTS IN EACH LEVEL

The following section provides a description of the instruments in each level in the hierarchy. It describes notably instruments classified in Level 3 and the associated valuation methodologies.
For main trading book instruments and derivatives classified in Level 3, further quantitative information is provided about the inputs used to derive fair value.

Level 1

This level encompasses all derivatives and securities that are listed on exchanges or quoted continuously in other active markets.

Level 1 includes notably equity securities and liquid bonds, shortselling of these instruments, derivative instruments traded on organised markets (futures, options, …). It includes shares of funds and UCITS, for which the net asset value is calculated on a daily basis, as well as debt representative of shares of consolidated funds held by third parties.

Level 2

The Level 2 stock of securities is composed of securities which are less liquid than the Level 1 bonds. They are predominantly government bonds, corporate debt securities, mortgage backed securities, fund shares and short-term securities such as certificates of deposit. They are classified in Level 2 notably when external prices for the same security can be regularly observed from a reasonable number of market makers that are active in this security, but these prices do not represent directly tradable prices. This comprises amongst other, consensus pricing services with a reasonable number of contributors that are active market makers as well as indicative runs from active brokers and/or dealers. Other sources such as primary issuance market, collateral valuation and counterparty collateral valuation matching may also be used where relevant.

Repurchase agreements are classified predominantly in Level 2. The classification is primarily based on the observability and liquidity of the repo market, depending on the underlying collateral and the maturity of the repo transaction.

Debts issued designated as at fair value through profit and loss, are classified in the same level as the one that would apply to the embedded derivative taken individually. The issuance spread is considered observable.

Derivatives classified in Level 2 comprise mainly the following instruments:

- Vanilla instruments such as interest rate swaps, caps, floors and swaptions, credit default swaps, equity/foreign exchange (FX)/commodities forwards and options;
- Structured derivatives such as exotic FX options, mono- and multi-underlying equity/funds derivatives, single curve exotic interest rate derivatives and derivatives based on structured rates.

The above derivatives are classified in Level 2 when there is a documented stream of evidence supporting one of the following:

- Fair value is predominantly derived from prices or quotations of other Level 1 and Level 2 instruments, through standard market interpolation or stripping techniques whose results are regularly corroborated by real transactions;
- Fair value is derived from other standard techniques such as replication or discounted cash flows that are calibrated to observable prices, that bear limited model risk and enable an effective offset of the risks of the instrument through trading Level 1 or Level 2 instruments;
- Fair value is derived from more sophisticated or proprietary valuation techniques but is directly evidenced through regular back-testing using external market-based data.

Determining of whether an over-the-counter (OTC) derivative is eligible for Level 2 classification involves judgement. Consideration is given to the origin, transparency and reliability of external data used, and the amount of uncertainty associated with the use of models. It follows that the Level 2 classification criteria involve multiple analysis axis within an "observability zone" whose limits are determined by i) a predetermined list of product categories and ii) the underlying and maturity bands. These criteria are regularly reviewed and updated, together with the applicable valuation adjustments, so that the classification by level remains consistent with the valuation adjustment policy.

Level 3

Level 3 securities of the trading book mainly comprise units of funds and unlisted equity shares measured at fair value through profit or loss or through equity.

Unlisted private equities are systematically classified as Level 3, with the exception of UCITS with a daily net asset value which are classified in the Level 1 of the fair value hierarchy.

Shares and other unlisted variable income securities in level 3 are valued using one of the following methods: a share of revalued net book value, multiples of comparable companies, future cash flows method, multi-criteria approach.

Repurchase agreements*: *mainly long-term or structured repurchase agreements on corporate bonds and ABSs: The valuation of these transactions requires proprietary methodologies given the bespoke nature of the transactions and the lack of activity and price discovery in the long-term repo market. The curves used in the valuation are corroborated using available data such as the implied basis of the relevant benchmark bond pool, recent long-term repo trade data and price enquiry data. Valuation adjustments applicable to these exposures are commensurate with the degree of uncertainty inherent in the modelling choices and amount of data available.

Debts issued designated as at fair value through profit or loss, are classified in the same level as the one that would apply to the embedded derivative taken individually. The issuance spread is considered observable.

Derivatives

Vanilla derivatives are classified in Level 3 when the exposure is beyond the observation zone for rate curves or volatility surfaces, or relates to less liquid markets such as tranches on old credit index series or emerging markets interest rates markets. The main instruments are:

- ***Interest rate derivatives***: exposures mainly comprise swap products in less liquid currencies. Classification is driven by the lower liquidity of some maturities, while observation capabilities through consensus may be available. The valuation technique is standard, and uses external market information and extrapolation techniques.
- ***Credit derivatives (CDS)***: exposures mainly comprise CDSs beyond the maximum observable maturity and, to a much lesser extent, CDSs on illiquid or distressed names and CDSs on loan indices. Classification is driven by the lack of liquidity while observation capabilities may be available notably through consensus. Level 3 exposures also comprise CDS and Total Return Swaps (TRS) positions on securitised assets. These are priced along the same modelling techniques as the underlying bonds, taking into consideration the funding basis and specific risk premium.
- ***Equity derivatives***: exposures essentially comprise long dated forward or volatility products or exposures where there is a limited market for optional products. The marking of the forward curves and volatility surfaces beyond the maximum observable maturity relies on extrapolation techniques. However, when there is no market for model input, volatility or forward is generally determined on the basis of proxy or historical analysis.

  Similarly, long-term transactions on equity baskets are also classified in Level 3, based on the absence of equity correlation observability on long maturities.

These vanilla derivatives are subject to valuation adjustments linked to uncertainty on liquidity, specialised by nature of underlying and liquidity bands.

Structured derivatives classified in Level 3 predominantly comprise structured derivatives of which hybrid products (FX/Interest Rates hybrids, Equity hybrids), credit correlation products, prepayment-sensitive products, some stock basket optional products and some interest rate optional instruments. The main exposures are described below, with insight into the related valuation techniques and on the source of uncertainty:

- ***Structured interest rate options*** are classified in Level 3 when they involve currencies where there is not sufficient observation or when they include a quanto feature where the pay-off is measured with a forex forward fixed rate (except for the main currencies). Long term structured derivatives are also classified in Level 3.

- ***Hybrid FX/Interest rate products*** essentially comprise a specific product family known as Power Reverse Dual Currency (PRDC). The valuation of PRDCs requires sophisticated modelling of joint behaviour of FX and interest rate, and is notably sensitive to the unobservable FX/ interest rate correlations. PRDCs valuations are corroborated with recent trade data and consensus data.

- ***Securitisation swaps*** mainly comprise fixed rate swaps, cross currency or basis swaps whose notional is indexed to the prepayment behaviour of some underlying portfolio. The estimation of the maturity profile of securitisation swaps is corroborated by statistical estimates using external historical data.

- ***Forward volatility options*** are generally products whose pay-off is indexed to the future variability of a rate index such as volatility swaps. These products involve material model risk as it is difficult to infer forward volatility information from the market-traded instruments. The valuation adjustment framework is calibrated to the uncertainty inherent in the product, and to the range of uncertainty from the existing external consensus data.

- ***Inflation derivatives*** classified in Level 3 mainly comprise swap products on inflation indices that are not associated with a liquid indexed bond market, optional products on inflation indices (such as caps and floors) and other forms of inflation indices involving optionality on the inflation indices or on the inflation annual rate. Valuation techniques used for inflation derivatives are predominantly standard market models. Proxy techniques are used for a few limited exposures. Although the valuations are corroborated through monthly consensus data, these products are classified as Level 3 due to their lack of liquidity and some uncertainties inherent in the calibration.

- The valuation of ***bespoke CDOs*** requires correlation of default events. This information is inferred from the active index tranche market through a proprietary projection technique and involves proprietary extrapolation and interpolation techniques. Multi-geography CDOs further require an additional correlation assumption. Finally, the bespoke CDO model also involves proprietary assumptions and parameters related to the dynamic of the recovery factor. CDO modelling, is calibrated on the observable index tranche markets, and is regularly back-tested against consensus data on standardised pools. The uncertainty arises from the model risk associated with the projection and geography mixing technique, and the uncertainty of associated parameters, together with the recovery modelling.

- ***N to Default baskets*** are other forms of credit correlation products, modelled through standard copula techniques. The main inputs required are the pair-wise correlations between the basket components which can be observed in the consensus and the transactions. Linear baskets are considered observable.

- ***Equity and equity-hybrid correlation products*** are instruments whose pay-off is dependent on the joint behaviour of a basket of equities/indices leading to a sensitivity of the fair value measurement to the correlation amongst the basket components. Hybrid versions of these instruments involve baskets that mix equity and non-equity underlyings such as commodity indices. Only a subset of the Equity/index correlation matrix is regularly observable and traded, while most cross-asset correlations are not active. Therefore, classification in Level 3 depends on the composition of the basket, the maturity, and the hybrid nature of the product. The correlation input is derived from a proprietary model combining historical estimators, and other adjustment factors, that are corroborated by reference to recent trades or external data. The correlation matrix is essentially available from consensus services, and when a correlation between two underlying instruments is not available, it might be obtained from extrapolation or proxy techniques.

These structured derivatives are subject to specific valuation adjustments to cover uncertainties linked to liquidity, parameters and model risk.

Valuation adjustments (CVA, DVA and FVA)

The valuation adjustment for counterparty credit risk (CVA), own-credit risk for derivatives (DVA) and the explicit funding valuation adjustment (FVA) are deemed to be unobservable components of the valuation framework and therefore classified in Level 3. This does not impact, in general cases, the classification of individual transactions into the fair value hierarchy. However, a specific process allows to identify individual deals for which the marginal contribution of these adjustments and related uncertainty is significant. Are particularly concerned some insufficiently collateralized vanilla interest rate instruments with very long residual maturity.

The below table provides the range of values of main unobservable inputs for the valuation of level 3 financial instruments. The ranges displayed correspond to a variety of different underlying instruments and are meaningful only in the context of the valuation technique implemented by BNP Paribas. The weighted averages, where relevant and available, are based on fair values, nominal amounts or sensitivities.

The main unobservable parameters used for the valuation of debt issued in level 3 are equivalent to these of their economic hedge derivative. Information on those derivatives, displayed in the following table, is also applicable to these debts.

Risk classes	Balance Sheet valuation *(in millions of euros)*		Main product types composing the Level 3 stock within the risk class	Valuation technique used for the product types considered	Main unobservable inputs for the product types considered	Range of unobservable input across Level 3 population considered	Weighted average
	Asset	Liability					
Repurchase agreements	267	1,844	Long-term repo and reverse-repo agreements	Proxy techniques, based amongst other on the funding basis of a benchmark bond pool, that is actively traded and representative of the repo underlying	Long-term repo spread on private bonds (High Yield, High Grade) and on ABSs	0 bp to 124 bp	92 bp (a)
Interest rate derivatives	1,234	1,367	Hybrid Forex / Interest rates derivatives	Hybrid Forex interest rate option pricing model	Correlation between FX rate and interest rates. Main currency pairs are EUR/JPY, USD/JPY, AUD/JPY	10% to 50%	39% (a)
			Hybrid inflation rates / Interest rates derivatives	Hybrid inflation interest rate option pricing model	Correlation between interest rates and inflation rates mainly in Europe.	0% to 30%	24%
			Floors and caps on inflation rate or on the cumulative inflation (such as redemption floors), predominantly on European and French inflation	Inflation pricing model	Volatility of cumulative inflation	0.7% to 10%	(b)
					Volatility of the year on year inflation rate	0.2% to 2.0%	
			Forward Volatility products such as volatility swaps, mainly in euro	Interest rates option pricing model	Forward volatility of interest rates	0.3% to 0.7%	(b)
			Balance-guaranteed fixed rate, basis or cross currency swaps, predominantly on European collateral pools	Prepayment modelling Discounted cash flows	Constant prepayment rates	0.1 % to 18%	10.2% (a)
Credit Derivatives	346	455	Collateralised Debt Obligations and index tranches for inactive index series	Base correlation projection technique and recovery modelling	Base correlation curve for bespoke portfolios	20% to 78%	(b)
					Inter-regions default cross correlation	80 % to 90%	90%(c)
					Recovery rate variance for single name underlyings	0 to 25%	(b)
			N-to-default baskets	Credit default model	Default correlation	50% to 85%	60.8% (a)
			Single name Credit Default Swaps (other than CDS on ABSs and loans indices)	Stripping, extrapolation and interpolation	Credit default spreads beyond observation limit (10 years)	159 bp to 378 bp (1)	369 bp (c)
					Illiquid credit default spread curves (across main tenors)	12 bp to 695 bp (2)	105 bp (c)
Equity Derivatives	2,643	5,694	Simple and complex derivatives on multi-underlying baskets on stocks	Various volatility option models	Unobservable equity volatility	0% to 86% (3)	26% (d)
					Unobservable equity correlation	17% to 93%	56% (c)

(1) The upper part of the range relates to non-material balance sheet position on a European corporate. The other part relates mainly to sovereign issuers.

(2) The upper bound of the range relates to a financial sector issuer that represents an insignificant portion of the balance sheet (CDSs with illiquid underlying instruments).

(3) The upper part of the range relates to three equity instruments representing a non-material portion of the balance sheet on options with equity underlying instruments. Including these inputs, the upper bound of the range would be around 422 %.

(a) Weights based on relevant risk axis at portfolio level

(b) No weighting, since no explicit sensitivity is attributed to these inputs

(c) Weighting is not based on risks, but on an alternative methodology in relation with the Level 3 instruments (present value or notional)

(d) Simple averaging

TABLE OF MOVEMENTS IN LEVEL 3 FINANCIAL INSTRUMENTS

For Level 3 financial instruments, the following movements occurred during the year ended 31 December 2018:

In millions of euros	Financial assets				Financial liabilities		
	Financial instruments at fair value through profit or loss held for trading	Financial instruments at fair value through profit or loss not held for trading	Financial assets at fair value through equity	TOTAL	Financial instruments at fair value through profit or loss held for trading	Financial instruments designated as at fair value through profit or loss	TOTAL
At 1 January 2018	**3,986**	**5,847**	**849**	**10,682**	**(10,124)**	**(13,373)**	**(23,497)**
Purchases	474	1,000	142	**1,616**			**-**
Issues				**-**		(4,113)	**(4,113)**
Sales	(611)	(748)		**(1,359)**	295		**295**
Settlements [(1)]	(158)	(370)	(2)	**(530)**	(746)	2,102	**1,356**
Transfers to level 3	621	129	3	**753**	(451)	(1,860)	**(2,311)**
Transfers from level 3	(1,534)	(421)	(44)	**(1,999)**	662	2,067	**2,729**
Gains (or losses) recognised in profit or loss with respect to transactions expired or terminated during the period	(160)	206	(5)	**41**	(894)	(551)	**(1,445)**
Gains (or losses) recognised in profit or loss with respect to unexpired instruments at the end of the period	2,626	(6)		**2,620**	1,409	903	**2,312**
Changes in fair value of assets and liabilities recognised directly in equity							
- Items related to exchange rate movements	6	15		**21**	(110)	(105)	**(215)**
- Changes in fair value of assets and liabilities recognised in equity			14	**14**	4		**4**
At 31 December 2018	**5,250**	**5,652**	**957**	**11,859**	**(9,955)**	**(14,930)**	**(24,885)**

[(1)] For the assets, includes redemptions of principal, interest payments as well as cash inflows and outflows relating to derivatives. For the liabilities, includes principal redemptions, interest payments as well as cash inflows and outflows relating to derivatives the fair value of which is negative.

Transfers out of Level 3 of derivatives at fair value include mainly the update of the observability tenor of certain yield curves, and of market parameters related to repurchase agreements and credit transactions but also the effect of derivatives becoming only or mainly sensitive to observable inputs due to the shortening of their lifetime.

Transfers into Level 3 of instruments at fair value reflect the effect of the regular update of the observability zones.

Transfers have been reflected as if they had taken place at the beginning of the reporting period.

The Level 3 financial instruments may be hedged by other Level 1 and Level 2 instruments, the gains and losses of which are not shown in this table. Consequently, the gains and losses shown in this table are not representative of the gains and losses arising from management of the net risk on all these instruments.

SENSITIVITY OF FAIR VALUE TO REASONABLY POSSIBLE CHANGES IN LEVEL 3 ASSUMPTIONS

The following table summarises those financial assets and financial liabilities classified as Level 3 for which alternative assumptions in one or more of the unobservable inputs would change fair value significantly.

The amounts disclosed are intended to illustrate the range of possible uncertainty inherent to the judgement applied when estimating Level 3 parameters, or when selecting valuation techniques. These amounts reflect valuation uncertainties that prevail at the measurement date, and even though such uncertainties predominantly derive from the portfolio sensitivities that prevailed at that measurement date, they are not predictive or indicative of future movements in fair value, nor do they represent the effect of market stress on the portfolio value.

In estimating sensitivities, BNP Paribas either remeasured the financial instruments using reasonably possible inputs, or applied assumptions based on the valuation adjustment policy.

For the sake of simplicity, the sensitivity on cash instruments that are not relating to securitised instruments was based on a uniform 1% shift in the price. More specific shifts were however calibrated for each class of the Level 3 securitised exposures, based on the possible ranges of the unobservable inputs.

For derivative exposures, the sensitivity measurement is based on the credit valuation adjustment (CVA), the explicit funding valuation adjustment (FVA) and the parameter and model uncertainty adjustments related to Level 3.

Regarding the credit valuation adjustment (CVA) and the explicit funding valuation adjustment (FVA), the uncertainty was calibrated based on prudent valuation adjustments described in the technical standard "Prudent Valuation" published by the European Banking Authority. For other valuation adjustments, two scenarios were considered: a favourable scenario where all or portion of the valuation adjustment is not considered by market participants, and an unfavourable scenario where market participants would require twice the amount of valuation adjustments considered by BNP Paribas for entering into a transaction.

	31 December 2018 *IFRS 9 & IFRS 15*		1 January 2018 *IFRS 9 & IFRS 15*	
In millions of euros	Potential impact on income	Potential impact on equity	Potential impact on income	Potential impact on equity
Asset Backed Securities (ABS)			+/-2	
Other debt securities	+/-9	+/-2	+/-10	
Equities and other equity securities	+/-40	+/-8	+/-41	+/-8
Loans and repurchase agreements	+/-25		+/-19	
Derivative financial instruments	+/-593		+/-552	
Interest rate and foreign exchange derivatives	*+/-365*		*+/-357*	
Credit derivatives	*+/-59*		*+/-35*	
Equity derivatives	*+/-167*		*+/-155*	
Other derivatives	*+/-2*		*+/-5*	
Sensitivity of Level 3 financial instruments	**+/-667**	**+/-10**	**+/-624**	**+/-8**

DEFERRED MARGIN ON FINANCIAL INSTRUMENTS MEASURED USING TECHNIQUES DEVELOPED INTERNALLY AND BASED ON INPUTS PARTLY UNOBSERVABLE IN ACTIVE MARKETS

Deferred margin on financial instruments ("Day One Profit") only concerns the scope of market activities eligible for Level 3.

The day one profit is calculated after setting aside valuation adjustments for uncertainties as described previously and released to profit or loss over the expected period for which the inputs will be unobservable. The unamortised amount is included under "Financial instruments at fair value through profit or loss" as a reduction in the fair value of the relevant transactions.

In millions of euros	Deferred margin at 1 January 2018	Deferred margin on transactions during the year	Margin taken to the profit and loss account during the year	Deferred margin at 31 December 2018
Interest rate and foreign exchange derivatives	309	117	(124)	302
Credit derivatives	96	66	(70)	92
Equity derivatives	276	208	(217)	267
Other derivatives	5	15	(7)	13
Derivative financial instruments	**686**	**406**	**(418)**	**674**

5.e FINANCIAL ASSETS AT AMORTISED COST

- **Detail of loans and advances by nature**

In millions of euros	31 December 2018 IFRS 9 & IFRS 15			1 January 2018 IFRS 9 & IFRS 15		
	Gross value	Impairment (note 3.h)	Carrying amount	Gross value	Impairment (note 3.h)	Carrying amount
Loans and advances to credit institutions	**19,707**	**(151)**	**19,556**	**20,502**	**(146)**	**20,356**
On demand accounts	7,234	(17)	7,217	7,226	(18)	7,208
Loans(1)	11,628	(134)	11,494	11,616	(128)	11,488
Repurchase agreements	845	-	845	1,660	-	1,660
Loans and advances to customers	**789,952**	**(24,081)**	**765,871**	**758,586**	**(27,410)**	**731,176**
On demand accounts	41,482	(4,243)	37,239	42,605	(5,308)	37,297
Loans to customers	714,243	(18,681)	695,562	685,019	(20,976)	664,043
Finance leases	33,291	(1,157)	32,134	30,293	(1,126)	29,167
Repurchase agreements	936	-	936	669	-	669
Total loans and advances at amortised cost	**809,659**	**(24,232)**	**785,427**	**779,088**	**(27,556)**	**751,532**

(1)Loans and advances to credit institutions include term deposits made with central banks.

- **Detail of debt securities**

In millions of euros	31 December 2018 IFRS 9 & IFRS 15			1 January 2018 IFRS 9 & IFRS 15		
	Gross value	Impairment (note 3.h)	Carrying amount	Gross value	Impairment (note 3.h)	Carrying amount
Governments	33,254	(16)	33,238	30,891	(17)	30,874
Other public administration	18,534	(3)	18,531	18,463	(5)	18,458
Credit institutions	5,082	(3)	5,079	3,836	(4)	3,832
Others	18,333	(108)	18,225	16,338	(76)	16,262
Total debt securities at amortised cost	**75,203**	**(130)**	**75,073**	**69,528**	**(102)**	**69,426**

- **Detail of loans and advances and debt securities by stage**

In millions of euros	31 December 2018 IFRS 9 & IFRS 15			1 January 2018 IFRS 9 & IFRS 15		
	Gross value	Impairment (note 3.h)	Carrying amount	Gross value	Impairment (note 3.h)	Carrying amount
Loans and advances to credit institutions	19,707	(151)	19,556	20,502	(146)	20,356
Stage 1	19,128	(13)	19,115	19,640	(9)	19,631
Stage 2	419	(40)	379	706	(41)	665
Stage 3	160	(98)	62	156	(96)	60
Loans and advances to customers	789,952	(24,081)	765,871	758,586	(27,410)	731,176
Stage 1	668,667	(1,515)	667,152	631,760	(1,422)	630,338
Stage 2	87,328	(3,231)	84,097	89,413	(3,626)	85,787
Stage 3	33,957	(19,335)	14,622	37,413	(22,362)	15,051
Debt securities	75,203	(130)	75,073	69,528	(102)	69,426
Stage 1	74,240	(21)	74,219	68,325	(14)	68,311
Stage 2	769	(31)	738	952	(24)	928
Stage 3	194	(78)	116	251	(64)	187

- **Breakdown of finance leases**

In millions of euros	31 December 2018 IFRS 9 & IFRS 15	1 January 2018 IFRS 9 & IFRS 15
Gross investment	35,795	34,036
Receivable within 1 year	*9,525*	*10,466*
Receivable after 1 year but within 5 years	*21,346*	*20,466*
Receivable beyond 5 years	*4,924*	*3,104*
Unearned interest income	**(2,504)**	**(3,743)**
Net investment before impairment	33,291	30,293
Receivable within 1 year	*8,996*	*9,248*
Receivable after 1 year but within 5 years	*19,672*	*18,304*
Receivable beyond 5 years	*4,623*	*2,741*
Impairment provisions	**(1,157)**	**(1,126)**
Net investment after impairment	32,134	29,167

5.f IMPAIRED FINANCIAL ASSETS (STAGE 3)

The following tables present the carrying amounts of impaired financial assets carried at amortised cost and of impaired financing and guarantee commitments, as well as related collateral and other guarantees.
The amounts shown for collateral and other guarantees correspond to the lower of the value of the collateral or other guarantee and the value of the secured assets.

In millions of euros *IFRS 9 & IFRS 15*	31 December 2018			
	Stage 3 assets			Collateral received
	Gross value	Impairment	Net	
Loans and advances to credit institutions (note 5.e)	160	(98)	62	132
Loans and advances to customers (note 5.e)	33,957	(19,335)	14,622	9,663
Debt securities at amortised cost (note 5.e)	194	(78)	116	-
Total amortised-cost impaired assets (stage 3)	**34,311**	**(19,511)**	**14,800**	**9,795**
Financing commitments given	644	(37)	607	148
Guarantee commitments given	1,285	(281)	1,004	250
Total off-balance sheet impaired commitments (stage 3)	**1,929**	**(318)**	**1,611**	**398**

In millions of euros *IFRS 9 & IFRS 15*	1 January 2018			
	Stage 3 assets			Collateral received
	Gross value	Impairment	Net	
Loans and advances to credit institutions (note 5.e)	156	(96)	60	156
Loans and advances to customers (note 5.e)	37,413	(22,362)	15,051	10,407
Debt securities at amortised cost (note 5.e)	251	(64)	187	-
Total amortised-cost impaired assets (stage 3)	**37,820**	**(22,522)**	**15,298**	**10,563**
Financing commitments given	909	(39)	870	400
Guarantee commitments given	968	(258)	710	256
Total off-balance sheet impaired commitments (stage 3)	**1,877**	**(297)**	**1,580**	**656**

5.g FINANCIAL LIABILITIES AT AMORTISED COST DUE TO CREDIT INSTITUTIONS AND CUSTOMERS

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Deposits from credit institutions	**78,915**	**76,503**
On demand accounts	10,571	9,906
Interbank borrowings[1]	61,859	61,881
Repurchase agreements	6,485	4,716
Deposits from customers	**796,548**	**760,941**
On demand deposits	473,968	450,381
Savings accounts	146,362	146,422
Term accounts and short-term notes	175,665	162,672
Repurchase agreements	553	1,466

[1] Interbank borrowings from credit institutions include term deposits from central banks.

5.h DEBT SECURITIES AND SUBORDINATED DEBT

This note covers all debt securities in issue and subordinated debt measured at amortised cost and designated as at fair value through profit or loss.

DEBT SECURITIES AT FAIR VALUE THROUGH PROFIT OR LOSS (note 5.a)

Issuer / Issue date In millions of euros	Currency	Original amount in foreign currency (millions)	Date of call or interest step-up	Interest rate	Interest step-up	Conditions precedent for coupon payment [(1)]	31 December 2018 IFRS 9 & IFRS 15	1 January 2018 IFRS 9 & IFRS 15
Debt securities							48,964	47,034
Subordinated debt							787	836
- Redeemable subordinated debt			[(2)]				**118**	**167**
- Perpetual subordinated debt							**669**	**669**
BNP Paribas Fortis Dec. 2007[(3)]	EUR	3,000	Dec.-14	3-month Euribor +200 bp		A	669	669

[(1)] Conditions precedent for coupon payment:

A Coupon payments are halted should the issuer have insufficient capital or the underwriters become insolvent or when the dividend declared for Ageas shares falls below a certain threshold.

[(2)] After agreement from the banking supervisory authority and at the issuer's initiative, these debt issues may contain a call provision authorising the Group to redeem the securities prior to maturity by repurchasing them in the stock market, via public tender offers, or in the case of private placements over the counter. Debt issued by BNP Paribas SA or foreign subsidiaries of the Group via placements in the international markets may be subject to early redemption of the capital and early payment of interest due at maturity at the issuer's discretion on or after a date stipulated in the issue particulars (call option), or in the event that changes in the applicable tax rules oblige the BNP Paribas Group issuer to compensate debt-holders for the consequences of such changes. Redemption may be subject to a notice period of between 15 and 60 days, and is in all cases subject to approval by the banking supervisory authorities.

[(3)] Convertible And Subordinated Hybrid Equity-linked Securities (CASHES) issued by BNP Paribas Fortis (previously Fortis Banque) in December 2007.
The CASHES are perpetual securities but may be exchanged for Ageas (previously Fortis SA/NV) shares at the holder's sole discretion at a price of EUR 239.40. However, as of 19 December 2014, the CASHES will be automatically exchanged into Ageas shares if their price is equal to or higher than EUR 359.10 for twenty consecutive trading days. The principal amount will never be redeemed in cash. The rights of the CASHES holders are limited to the Ageas shares held by BNP Paribas Fortis and pledged to them.
Ageas and BNP Paribas Fortis have entered into a Relative Performance Note (RPN) contract, the value of which varies contractually so as to offset the impact on BNP Paribas Fortis of the relative difference between changes in the value of the CASHES and changes in the value of the Ageas shares.
As at 31 December 2018, the subordinated liability is eligible to Tier 1 capital for EUR 205 million (considering the transitional period).

DEBT SECURITIES MEASURED AT AMORTISED COST

Issuer / Issue date In millions of euros	Currency	Original amount in foreign currency (millions)	Date of call or interest step-up	Interest rate	Interest step-up	Conditions precedent for coupon payment [1]	31 December 2018 IFRS 9 & IFRS 15	1 January 2018 IFRS 9 & IFRS 15
Debt securities							151,451	148,156
- Debt securities in issue with an initial maturity of less than one year							**70,077**	**72,337**
Negotiable debt securities							70,077	72,337
- Debt securities in issue with an initial maturity of more than one year							**81,374**	**75,819**
Negotiable debt securities							50,809	54,756
Bonds							30,565	21,063
Subordinated debt							17,627	15,951
- Redeemable subordinated debt			(2)				**15,876**	**14,116**
- Undated subordinated notes							**1,515**	**1,593**
BNP Paribas SA Oct. 85	EUR	305	-	TMO - 0.25%	-	B	254	254
BNP Paribas SA Sept. 86	USD	500	-	6 month-Libor + 0.075%	-	C	239	228
BNP Paribas Cardif Nov. 14	EUR	1,000	Nov. - 25	4.032%	3-month Euribor + 393 bp	D	999	1,000
Others							23	111
- Participating notes							**222**	**222**
BNP Paribas SA July 84 [3]	EUR	337	-	(4)	-		215	215
Others							7	7
- Expenses and commission, related debt							**14**	**20**

[1] Conditions precedent for coupon payment

B Payment of the interest is mandatory, unless the Board of Directors decides to postpone these payments after the Shareholders' General Meeting has officially noted that there is no income available for distribution, where this occurs within the 12-month period preceding the due date for payment of the interest. Interest payments are cumulative and are payable in full once dividend payments resume.

C Payment of the interest is mandatory, unless the Board of Directors decides to postpone these payments after the Shareholders' General Meeting has validated the decision not to pay out a dividend, where this occurs within the 12-month period preceding the due date for payment of the interest. Interest payments are cumulative and are payable in full once dividend payments resume. The bank has the option of resuming payment of interest arrears, even where no dividend is paid out.

D Payment of the interest is mandatory, except for cases of regulatory deficiency, in agreement with the regulator, or of suspension of payments. Interest payments are cumulative and are payable in full, once coupon payments resume, or, if these events occur before, when the issuance is redeemed or when the issuer is liquidated.

[2] See reference relating to "Debt securities at fair value through profit or loss".

[3] The participating notes issued by BNP Paribas SA may be repurchased as provided for in the law of 3 January 1983. The number of notes in the market is 1,434,092.

[4] Depending on net income subject to a minimum of 85% of the TMO rate and a maximum of 130% of the TMO rate.

5.i Financial investments of insurance activities

In millions of euros	31 December 2018			1 January 2018		
	Assets not representative of unit-linked insurance contracts	Assets representative of unit-linked insurance contracts *(financial risk supported by policyholders)*	Total	Assets not representative of unit-linked insurance contracts	Assets representative of unit-linked insurance contracts *(financial risk supported by policyholders)*	Total
Financial instruments designated as at fair value through profit or loss	41,154	61,793	102,947	35,951	60,287	96,238
Derivative financial instruments	907		907	366		366
Available-for-sale financial assets	112,041		112,041	114,166		114,166
Held-to-maturity financial assets	3,720		3,720	4,231		4,231
Loans and receivables	3,605		3,605	3,110		3,110
Equity-method investments	363	-	363	386	-	386
Investment property	2,982	2,872	5,854	3,107	3,106	6,213
Total	**164,772**	**64,665**	**229,437**	**161,317**	**63,393**	**224,710**
Reinsurers' share of technical reserves	2,871	-	2,871	3,002	-	3,002
Financial investments of insurance activities	**167,643**	**64,665**	**232,308**	**164,319**	**63,393**	**227,712**

Investments in financial instruments of insurance activities are accounted for according to IAS 39 principles.

The fair value of financial assets with contractual cash-flows corresponding only to payments of principal and interest on principal amounts to EUR 107.8 billion as at 31 December 2018. It amounted to EUR 108.0 billion as at 1 January 2018, which represents a variation of EUR -0.2 billion over the period.

The fair value of other financial assets amounts to EUR 121.7 billion, and corresponds to all financial instruments that do not meet the previously mentioned criteria, derivatives and financial assets managed on a market value basis. It amounted to EUR 116.6 billion as at 1 January 2018, which represents a variation of EUR +5.1 billion over the period.

The fair value of investment properties accounted for at amortized cost amounts to EUR 4.0 billion as at 31 December 2018, compared with EUR 3.3 billion as at 1 January 2018.

- **Measurement of the fair value of financial instruments**

The criteria for allocating instruments to the levels of the fair value hierarchy, the corresponding valuation methodologies and the principles of transfer between the levels of the hierarchy for insurance investments are similar to those applied for the Group's other financial instruments (note 5.d).

In millions of euros,	31 December 2018				1 January 2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Available-for-sale financial assets	**95,086**	**16,679**	**276**	**112,041**	**98,206**	**14,828**	**1,132**	**114,166**
Equity instruments	4,741	1,093	234	6,068	5,063	1,193	1,091	7,347
Debt securities	90,345	15,586	42	105,973	93,143	13,635	41	106,819
Financial instruments designated as at fair value through profit or loss	**80,097**	**16,315**	**6,535**	**102,947**	**78,444**	**12,213**	**5,581**	**96,238**
Equity instruments	77,989	11,131	6,458	95,578	76,112	7,513	5,434	89,059
Debt securities	2,108	5,184	77	7,369	2,332	4,700	147	7,179
Derivative financial instruments	**-**	**622**	**285**	**907**	**11**	**355**	**-**	**366**
FINANCIAL ASSETS MEASURED AT FAIR VALUE	**175,183**	**33,616**	**7,096**	**215,895**	**176,661**	**27,396**	**6,713**	**210,770**

Level 1: this level comprises equities and liquid bonds, derivative instruments traded on organised markets (futures, options, etc.), units of funds and UCITS for which the net asset value is calculated on a daily basis.

Level 2: this level comprises equities, certain government or corporate bonds, other fund units and UCITS and over-the-counter derivatives.

Level 3: this level consists mainly of fund units and shares which are not quoted on active markets, consisting mainly of units in venture capital companies and funds.

- **Table of movements in Level 3 financial instruments**

For Level 3 financial instruments, the following movements occurred during the period:

In millions of euros,	Financial assets		
	Available-for-sale financial instruments	Financial instruments as at fair value through profit or loss	Total
At 1 January 2018	1,132	5,581	6,713
Purchases	276	2,392	2,668
Sales	(435)	(1,184)	(1,619)
Settlements	(642)	(281)	(923)
Transfers to Level 3	-	70	70
Transfers from Level 3	(51)	(144)	(195)
Gains recognised in profit or loss	46	373	419
Items related to exchange rate movements	(1)	13	12
Changes in fair value of assets and liabilities recognised in equity	(49)	-	(49)
At 31 December 2018	276	6,820	7,096

During the year ended 31 December 2018, transfers between Level 1 and Level 2 were not significant.

- **Detail of available-for-sale financial assets**

In millions of euros,	31 December 2018			1 January 2018		
	Debt securities	Equity instruments	Total	Debt securities	Equity instruments	Total
Balance sheet value	105,973	6,068	112,041	106,819	7,347	114,166
of which depreciation	-	(312)	(312)	-	(365)	(365)
of which changes in value recognised directly in equity	8,461	668	9,129	11,637	1,551	13,188
Deferred tax linked to these changes in value	(2,256)	(179)	(2,435)	(3,126)	(414)	(3,540)
Insurance policyholders surplus reserve from insurance entities, after deferred tax	(5,472)	(427)	(5,899)	(7,443)	(1,005)	(8,448)
Group share of changes in value of available-for-sale securities owned, by equity-method entities, after deferred tax and insurance policyholders' surplus reserve	688	54	742	656	129	785
Unamortised changes in value of available-for-sale securities	(1)	-	(1)	-	-	-
Other variations	-	-	-	(1)	-	(1)
Changes in value of assets taken directly to equity under the heading "Financial investments of insurance activities"	1,420	116	1,536	1,723	261	1,984
Attributable to equity shareholders	1,413	116	1,529	1,688	259	1,947
Attributable to minority interests	7	-	7	35	2	37

- **Fair value of financial instruments carried at amortised cost**

In millions of euros	31 December 2018					1 January 2018				
	Level 1	Level 2	Level 3	Total	Carrying value	Level 1	Level 2	Level 3	Total	Carrying value
Held-to-maturity financial assets	4,116	-	-	4,116	3,720	4,819	-	-	4,819	4,231
Loans and receivables	125	3,487	21	3,633	3,605	130	2,749	266	3,145	3,110

5.j TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES

In millions of euros	31 December 2018	1 January 2018
Technical reserves – Non-Life insurance contracts	**4,590**	**4,565**
Technical reserves - Life insurance contracts	**145,343**	**141,702**
- Insurance contracts	84,392	81,990
- Unit-linked contracts	60,951	59,712
Technical liabilities - investment contracts	**42,438**	**39,372**
- Investments contracts with discretionary participation feature	38,604	35,838
- Investment contracts without discretionary participation feature	3,834	3,534
Policyholders' surplus reserve - liability	**17,379**	**21,331**
Total technical reserves and liabilities related to insurance and investment contracts	209,750	206,970
Debts arising out of insurance and reinsurance operations	3,056	3,149
Derivative financial instruments	885	375
Total technical reserves and other insurance liabilities	213,691	210,494

The policyholders' surplus reserve arises from the application of shadow accounting. It represents the interest of policyholders within French and Italian life insurance subsidiaries in unrealised gains and losses and impairment losses on assets where the benefit paid under the policy is linked to the return on those assets. It is obtained from stochastic calculations modelling the unrealised gains and losses attributable to policyholders based on economic scenarios and assumptions as regards rates paid to customers and new business inflows. For France, this resulted in an interest of 90% in 2018, unchanged from 2017.

The change in technical reserves and liabilities related to insurance contracts breaks down as follows:

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Liabilities related to insurance contracts at start of period	206,970	197,250
Additions to insurance contract technical reserves and deposits taken on financial contracts related to life insurance	20,371	23,219
Claims and benefits paid	(15,493)	(16,830)
Effect of changes in value of admissible investments related to unit-linked business	(5,135)	3,393
Effect of movements in exchange rates	34	(566)
Effect of changes in the scope of consolidation	3,003	504
Liabilities related to insurance contracts at end of period	209,750	206,970

See note 5.i for details of reinsurers' share of technical reserves.

5.k CURRENT AND DEFERRED TAXES

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Current taxes	1,958	1,777
Deferred taxes	5,262	5,591
Current and deferred tax assets	**7,220**	**7,368**
Current taxes	1,023	887
Deferred taxes	1,232	1,347
Current and deferred tax liabilities	**2,255**	**2,234**

Change in deferred tax by nature over the period:

In millions of euros	1 January 2018	Changes recognised in profit or loss	Changes recognised in equity that may be reclassified to profit or loss	Changes recognised in equity that will not be reclassified to profit or loss	Effects of exchange rates, consolidation scope and other movements	31 December 2018
Financial instruments	(886)	(94)	505	(60)	17	(518)
Provisions for employee benefit obligations	986	(96)	-	(36)	(28)	826
Unrealised finance lease reserve	(395)	6	-	-	8	(381)
Credit risk impairment	3,047	42	-	-	22	3,111
Tax loss carryforwards	1,638	(324)	-	-	16	1,330
Other items	(146)	(46)	-	-	(146)	(338)
Net deferred taxes	**4,244**	**(512)**	**505**	**(96)**	**(111)**	**4,030**
Deferred tax assets	5,591					5,262
Deferred tax liabilities	(1,347)					(1,232)

In order to determine the amount of the tax loss carryforwards recognised as assets, the Group conducts every year a specific review for each relevant entity based on the applicable tax regime, notably incorporating any time limit rules, and a realistic projection of their future revenue and charges in line with their business plan.

Deferred tax assets recognised on tax loss carryforwards are mainly related to BNP Paribas Fortis for EUR 955 million, with a 6-year expected recovery period (unlimited carryforward period).

Unrecognised deferred tax assets totalled EUR 1,324 million at 31 December 2018, compared with EUR 1,205 million at 1 January 2018.

5.l Accrued income/expense and other assets/liabilities

In millions of euros	31 December 2018 IFRS 9 & IFRS 15	1 January 2018 IFRS 9 & IFRS 15
Guarantee deposits and bank guarantees paid	64,988	56,452
Collection accounts	369	654
Accrued income and prepaid expenses	7,355	6,179
Other debtors and miscellaneous assets	30,634	29,676
Total accrued income and other assets	**103,346**	**92,961**
Guarantee deposits received	48,308	38,918
Collection accounts	2,820	717
Accrued expense and deferred income	10,122	9,195
Other creditors and miscellaneous liabilities	28,312	31,642
Total accrued expense and other liabilities	**89,562**	**80,472**

5.m Equity-method investments

Cumulated financial information of associates and joint ventures is presented in the following table:

	Year to 31 Dec. 2018			31 December 2018 IFRS 9 & IFRS 15	Year to 31 Dec. 2017			1 January 2018 IFRS 9 & IFRS 15
In millions of euros	*Share of net income*	*Share of changes in assets and liabilities recognised directly in equity*	Share of net income and changes in assets and liabilities recognised directly in equity	Equity-method investments	*Share of net income*	*Share of changes in assets and liabilities recognised directly in equity*	Share of net income and changes in assets and liabilities recognised directly in equity	Equity-method investments
Joint ventures	*63*	*(74)*	(11)	804	*48*	*(57)*	(9)	893
Associates [1]	*565*	*(62)*	503	4,968	*665*	*(292)*	373	5,328
Total equity-method entities	***628***	***(136)***	**492**	**5,772**	***713***	***(349)***	**364**	**6,221**

[1] Including controlled but non material entities consolidated under the equity method.

Financing and guarantee commitments given by the Group to joint ventures are listed in the note 8.h Other related parties.

The carrying amount of the Group's investment in the main joint ventures and associates is presented in the following table:

In millions of euros	Country of registration	Activity	Interest (%)	31 December 2018	1 January 2018
Joint ventures					
Bpost banque	Belgium	Retail banking	50%	249	266
Union de Creditos Inmobiliarios	Spain	Retail mortgage	50%	239	251
Associates					
AG Insurance	Belgium	Insurance	25%	1,647	1,687
Bank of Nanjing	China	Retail banking	15%	1,372	1,483

5.n Property, plant, equipment and intangible assets used in operations, investment property

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*			1 January 2018 *IFRS 9 & IFRS 15*		
	Gross value	Accumulated depreciation, amortisation and impairment	Carrying amount	Gross value	Accumulated depreciation, amortisation and impairment	Carrying amount
Investment property	**1,031**	**(316)**	**715**	**1,213**	**(361)**	**852**
Land and buildings	7,084	(2,061)	5,023	7,443	(2,074)	5,369
Equipment, furniture and fixtures	7,130	(5,083)	2,047	6,947	(4,857)	2,090
Plant and equipment leased as lessor under operating leases	24,675	(6,805)	17,870	21,659	(5,870)	15,789
Other property, plant and equipment	2,086	(1,089)	997	1,961	(1,061)	900
Property, plant and equipment	**40,975**	**(15,038)**	**25,937**	**38,010**	**(13,862)**	**24,148**
Property, plant and equipment and investment property	**42,006**	**(15,354)**	**26,652**	**39,223**	**(14,223)**	**25,000**
Purchased software	3,703	(2,724)	979	3,366	(2,510)	856
Internally-developed software	4,250	(3,236)	1,014	4,139	(3,189)	950
Other intangible assets	2,334	(544)	1,790	1,990	(469)	1,521
Intangible assets	**10,287**	**(6,504)**	**3,783**	**9,495**	**(6,168)**	**3,327**

- **Investment property**

Land and buildings leased by the Group as lessor under operating leases are recorded in "Investment property".

The estimated fair value of investment property accounted for at amortised cost at 31 December 2018 is EUR 800 million, compared with EUR 942 million at 1 January 2018.

- **Operating leases**

Operating leases and investment property transactions are in certain cases subject to agreements providing for the following minimum future payments:

In millions of euros	31 December 2018	1 January 2018
Future minimum lease payments receivable under non-cancellable leases	**6,483**	**6,224**
Payments receivable within 1 year	*2,603*	*2,680*
Payments receivable after 1 year but within 5 years	*3,852*	*3,496*
Payments receivable beyond 5 years	*28*	*48*

Future minimum lease payments receivable under non-cancellable leases are payments that the lessee is required to make during the lease term.

- **Intangible assets**

Other intangible assets include leasehold rights, goodwill and trademarks acquired by the Group.

- **Depreciation, amortisation and impairment**

Net depreciation and amortisation expense for the year ended 31 December 2018 was EUR 1,674 million, compared with EUR 1,711 million for the year ended 31 December 2017.

The net increase in impairment on property, plant, equipment and intangible assets taken to the profit and loss account in the year ended 31 December 2018 amounted to EUR 2 million, compared with EUR 8 million for the year ended 31 December 2017.

5.o GOODWILL

In millions of euros	Year to 31 Dec. 2018 IFRS 9 & IFRS 15	Year to 31 Dec. 2017 IAS 39
Carrying amount at start of period	9,571	10,216
Acquisitions	99	292
Divestments	-	(15)
Impairment recognised during the period	(30)	(208)
Loss of control of First Hawaiian Inc (note 8.c)	(1,315)	-
Exchange rate adjustments	159	(714)
Other movements	3	-
Carrying amount at end of period	8,487	9,571
Gross value	11,462	12,560
Accumulated impairment recognised at the end of period	(2,975)	(2,989)

Goodwill by cash-generating unit is as follows:

In millions of euros	Carrying amount		Impairment recognised during the period		Acquisitions during the period	
	31 December 2018 IFRS 9 & IFRS 15	1 January 2018 IFRS 9 & IFRS 15	Year to 31 Dec. 2018 IFRS 9 & IFRS 15	Year to 31 Dec. 2017 IAS 39	Year to 31 Dec. 2018 IFRS 9 & IFRS 15	Year to 31 Dec. 2017 IAS 39
Retail Banking & Services	**7,348**	**8,472**	**(30)**	**(208)**	**69**	**292**
Domestic Markets	**1,428**	**1,415**	**-**	**-**	**17**	**160**
Arval	*503*	*503*				
Leasing Solutions	*151*	*135*			*17*	
New Digital Businesses	*159*	*159*				*159*
Personal Investors	*609*	*612*				*1*
Others	*6*	*6*				
International Financial Services	**5,920**	**7,057**	**(30)**	**(208)**	**52**	**132**
Asset Management	*185*	*167*			*15*	
Insurance	*352*	*352*				*57*
BancWest	*3,008*	*4,147*				
Personal Finance	*1,303*	*1,329*				*36*
Personal Finance - partnership tested individually	*318*	*348*	*(30)*	*(36)*		
Real Estate	*404*	*406*			*(2)*	*39*
Turk Ekonomi Bankasi A.S				*(172)*		
Wealth Management	*313*	*272*			*39*	
Others	*37*	*36*				
Corporate & Institutional Banking	**1,136**	**1,096**	**-**	**-**	**30**	**-**
Corporate Banking	*276*	*274*				
Global Markets	*418*	*407*				
Securities Services	*442*	*415*			*30*	
Other Activities	**3**	**3**	**-**	**-**	**-**	**-**
Total goodwill	8,487	9,571	(30)	(208)	99	292
Negative goodwill			83	7		
Change in value of goodwill recognised in the profit and loss account			53	(201)		

As at 30 June 2018, the Group considered the loss of control of First Hawaiian Inc within one year to be highly probable and applied the provisions of IFRS 5 on groups of assets and liabilities held for sale. The application of IFRS 5 had the effect of splitting the BancWest homogeneous group of businesses and, as a result, the related goodwill between Bank of the West and FHI (see note 8.c).

The homogeneous groups of businesses to which goodwill is allocated are:

Arval: Specialist in vehicle long-term leasing, Arval offers corporates (from multinational companies to small business clients) tailored solutions that optimise their employees' mobility and outsource the risks associated with fleet management. Recently, clientele was expanded to include individuals.

Leasing Solutions : BNP Paribas Leasing Solutions uses a multi-channel partnership approach (sales *via* referrals, partnerships, direct sales and banking networks) to offer corporate and small business clients an array of leasing and rental solutions, ranging from equipment financing to fleet outsourcing.

New digital businesses: they include in particular the account management service "Nickel", open to all, without any conditions regarding income, deposits or personal wealth, and without any overdraft or credit facility. This service, which operates in real time using the latest technology, is available through over 4,000 tobacconists.

Personal Investors: BNP Paribas Personal Investors is a digital specialist of banking and investment services. Mainly based in Germany, Austria, Spain and India, it provides a wide range of banking, savings and long and short term investment services to individual clients via the internet, and also on the phone and face-to-face. In addition to its activities destined to private clients, Personal Investors offers its services and IT platform to independent financial consultants, asset managers and FinTechs.

Asset Management: BNP Paribas Asset Management is the dedicated asset management business line of the BNP Paribas Group and offers services to individual investors (through internal distributors – BNP Paribas private and retail banking – and external distributors), to corporates and to institutional investors (insurance companies, retirement funds, official institutions, consultants). Its aim is to offer an added value based on a broad range of expertise throughout its active management of equities and bonds, its activity of private debt and real assets management and its multi-asset, quantitative and solutions division.

Insurance: BNP Paribas Cardif, a world leader in personal insurance, has designed, developed and marketed savings and protection products and services to protect individuals, their projects and their assets.

BNP Paribas Cardif has developed new forms of insurance and extended its offer of protection to health insurance, budget insurance, revenue and means of payment insurance, unexpected event protection (unemployment, accident, death, theft or breakage) or the protection of private digital data to meet the evolution of customers' needs.

In 2017, BNP Paribas Cardif and State Bank of India launched an Initial Public Offer on their joint venture, SBI Life, selling 4 % of this life insurer in India. BNP Paribas Cardif holds a 22 % interest in SBI Life at 31 December 2018.

BancWest: In the United States, the Retail Banking business is henceforth conducted through Bank of the West, which markets a very broad range of retail banking products and services to individuals, small businesses and corporate clients, through branches and offices in 23 States, mainly in western and mid-western America. It also has strong positions across the USA in several specialized lending activities, such as marine, recreational vehicles, church lending and agribusiness, and develops its commercial set up particularly in Corporate Banking, Wealth Management and Small and Medium Enterprise businesses.

Personal Finance: BNP Paribas Personal Finance is the Group's consumer credit specialist. Through its brands such as Cetelem, Cofinoga, Findomestic or AlphaCredit, Personal Finance provides a full range of consumer loans at point of sale (retail stores and car dealerships) or through its customer relation centres and online. The consumer credit business also operates within the Group's retail banking network in some countries, through the « PF Inside » set-up. Personal Finance offers insurance products tailored to local needs and practices in each of the countries where it operates. In Germany, Bulgaria, France, Hungary and Italy, the lending and insurance offer of Personal Finance has been complemented by savings products.

In 2017, BNP Paribas Personal Finance acquired the automotive finance activity of General Motors in Europe (Opel Vauxhall) with Banque PSA Finance (PSA group) and of 100% of SevenDay Finans AB, consumer credit specialist in Sweden.

Real Estate: BNP Paribas Real Estate serves the needs of its clients, whether institutional investors, corporates, public entities or individuals, at all stages of the life cycle of their property (from the conception of a construction project to its daily management).

In 2017, BNP Paribas Real Estate reinforced its transaction activity with the acquisition of Strutt&Parker, one of UK's largest independent property actors.

Turk Ekonomi Bankasi: Present mostly in Turkey, Turk Ekonomi Bankasi offers its customers (Retail, Corporate and SME) a wide array of financial products and services, including retail and private banking, treasury and capital markets services, and financing.

Wealth Management: Wealth Management encompasses the private banking activities of BNP Paribas and serves a clientele of wealthy individuals, shareholder families and entrepreneurs seeking a one-stop shop for all their wealth management and financial needs.

In 2018, BNP Paribas Wealth Management purchased the private banking activities of ABN Amro in Luxembourg.

Corporate Banking: Corporate Banking combines financing solutions to corporates, all transaction banking products, corporate finance advisory services in mergers and acquisitions and primary equity activities.

Global Markets: Global Markets provides investment, hedging, financing and research services across asset classes, to corporate and institutional clients – as well as private and retail banking networks. The sustainable, long-term business model of Global Markets connects clients to capital markets throughout EMEA (Europe, Middle East & Africa), Asia Pacific and the Americas, with innovative solutions and digital platforms. Global Markets includes activities of Fixed Income, Currencies & Commodities and Equity & Prime Services.

Securities Services: BNP Paribas Securities Services is one of the major global players in securities services and provides integrated solutions for all actors involved in the investment cycle, sell side, buy side and issuers.

In 2018, BNP Paribas Securities Services partnered with Janus Henderson for the acquisition of middle and back-office activities of Janus Henderson in the USA.

Goodwill impairment tests are based on three different methods: observation of transactions related to comparable businesses, share price data for listed companies with comparable businesses, and discounted future cash flows (DCF).

If one of the two comparables-based methods indicates the need for impairment, the DCF method is used to validate the results and determine the amount of impairment required.

The DCF method is based on a number of assumptions in terms of future revenues, expenses and cost of risk (cash flows) based on medium-term business plans over a period of five years. Cash flow projections beyond the 5-year forecast period are based on a growth rate to perpetuity and are normalised when the short-term environment does not reflect the normal conditions of the economic cycle.

The key parameters which are sensitive to the assumptions made are the cost of capital, the cost/income ratio, the cost of risk and the growth rate to perpetuity.

Cost of capital is determined on the basis of a risk-free rate, an observed market risk premium weighted by a risk factor based on comparables specific to each homogeneous group of businesses. The values of these parameters are obtained from external information sources.

Allocated capital is determined for each homogeneous group of businesses based on the "Common Equity Tier One" regulatory requirements for the legal entity to which the homogeneous group of businesses belongs, with a minimum of 7%.

The growth rate to perpetuity used is 2% for mature economies. For CGUs implemented in countries with high levels of inflation, a specific add-on is taken into account (calculated according to inflation rates disclosed by external sources).

The following table shows the sensitivity of cash generating unit valuations to changes in the value of parameters used in the DCF calculation: the cost of capital, the cost/income ratio in terminal value, the cost of risk in terminal value and the growth rate to perpetuity.

In 2017, the downward revision in growth prospects of Turk Ekonomi Bankasi led to the full impairment of the TEB goodwill (EUR 172 million).

- **Sensitivity of the main goodwill valuations to a 10-basis point change in the cost of capital, a 1% change in the cost/income ratio in terminal value, a 5 % change of the cost of risk in terminal value and a 50-basis point change in the growth rate to perpetuity**

In millions of euros	BancWest	Personal Finance
Cost of capital	**8.5%**	**9.4%**
Adverse change (+10 basis points)	(127)	(214)
Positive change (- 10 basis points)	131	220
Cost/income ratio	**61.6%**	**47.4%**
Adverse change (+ 1 %)	(217)	(485)
Positive change (-1 %)	217	485
Cost of risk	**(163)**	**(2,197)**
Adverse change (+ 5 %)	(181)	(295)
Positive change (- 5 %)	181	295
Growth rate to perpetuity	**2.0%**	**2.2%**
Adverse change (-50 basis points)	(259)	(451)
Positive change (+50 basis points)	302	517

For the impairment test of the BancWest homogeneous group of businesses, additional scenarios were analysed, based on a 9.5% cost of capital and a 3% growth rate to perpetuity specific to the Californian region. These analyses support the absence of impairment.

5.p PROVISIONS FOR CONTINGENCIES AND CHARGES

- **Provisions for contingencies and charges by type**

In millions of euros	1 January 2018 IFRS 9 & IFRS 15	Net additions to provisions	Provisions used	Changes in value recognised directly in equity	Effect of movements in exchange rates and other movements	31 December 2018 IFRS 9 & IFRS 15
Provisions for employee benefits	**6,740**	**537**	**(1,022)**	**(129)**	**(87)**	**6,039**
of which post-employment benefits *(note 7.b)*	4,339	225	(347)	(130)	(89)	3,998
of which post-employment healthcare benefits *(note 7.b)*	143	5	(3)	1	(15)	131
of which provision for other long-term benefits *(note 7.c)*	1,170	203	(265)		12	1,120
of which provision for voluntary departure, early retirement plans, and headcount adaptation plan *(note 7.d)*	389	113	(120)		(2)	380
of which provision for share-based payments *(note 7.e)*	699	(9)	(287)		7	410
Provisions for home savings accounts and plans	**156**	**(20)**	**-**	**-**	**-**	**136**
Provisions for credit commitments *(note 3.h)*	**1,277**	**(17)**	**(116)**	**-**	**48**	**1,192**
Provisions for litigations	**1,858**	**(40)**	**(461)**	**-**	**(9)**	**1,348**
Other provisions for contingencies and charges	**1,053**	**118**	**(196)**	**-**	**(70)**	**905**
Total provisions for contingencies and charges	**11,084**	**578**	**(1,795)**	**(129)**	**(118)**	**9,620**

- **Provisions and discount for home savings accounts and plans**

In millions of euros	31 December 2018	1 January 2018
Deposits collected under home savings accounts and plans	**18,102**	**18,137**
of which deposits collected under home savings plans	15,956	15,934
Aged more than 10 years	*3,824*	*3,914*
Aged between 4 and 10 years	*8,471*	*6,234*
Aged less than 4 years	*3,661*	*5,786*
Outstanding loans granted under home savings accounts and plans	**52**	**76**
of which loans granted under home savings plans	9	13
Provisions and discount recognised for home savings accounts and plans	**137**	**157**
provisions recognised for home savings plans	133	154
provisions recognised for home savings accounts	3	2
discount recognised for home savings accounts and plans	1	1

5.q Offsetting of financial assets and liabilities

The following tables present the amounts of financial assets and liabilities before and after offsetting. This information, required by IFRS 7, aims to enable the comparability with the accounting treatment applicable in accordance with generally accepted accounting principles in the United States (US GAAP), which are less restrictive than IAS 32 as regards offsetting.

“Amounts set off on the balance sheet” have been determined according to IAS 32. Thus, a financial asset and a financial liability are offset and the net amount presented on the balance sheet when, and only when, the Group has a legally enforceable right to set off the recognised amounts and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously. Amounts set off derive mainly from repurchase agreements and derivative instruments traded with clearing houses.

The “impacts of master netting agreements and similar agreements” are relative to outstanding amounts of transactions within an enforceable agreement, which do not meet the offsetting criteria defined by IAS 32. This is the case of transactions for which offsetting can only be performed in case of default, insolvency or bankruptcy of one of the contracting parties.

“Financial instruments given or received as collateral” include guarantee deposits and securities collateral recognised at fair value. These guarantees can only be exercised in case of default, insolvency or bankruptcy of one of the contracting parties.

Regarding master netting agreements, the guarantee deposits received or given in compensation for the positive or negative fair values of financial instruments are recognised in the balance sheet in accrued income or expenses and other assets or liabilities.

In millions of euros, at 31 December 2018 IFRS 9 & IFRS 15	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments received as collateral	Net amounts
Assets						
Financial instruments at fair value through profit or loss						
Securities	121,954		121,954			121,954
Loans and repurchase agreements	283,879	(100,163)	183,716	(37,657)	(135,421)	10,638
Derivative financial instruments (including derivatives used for hedging purposes)	480,745	(238,040)	242,705	(177,352)	(28,676)	36,677
Financial assets at amortised cost	860,567	(67)	860,500	(365)	(1,312)	858,823
of which repurchase agreements	*1,781*		*1,781*	*(365)*	*(1,312)*	*104*
Accrued income and other assets	103,346		103,346		(30,813)	72,533
of which guarantee deposits paid	*64,988*		*64,988*		*(30,813)*	*34,175*
Other assets not subject to offsetting	528,615		528,615			528,615
TOTAL ASSETS	**2,379,106**	**(338,270)**	**2,040,836**	**(215,374)**	**(196,222)**	**1,629,240**

In millions of euros, at 31 December 2018 IFRS 9 & IFRS 15	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments given as collateral	Net amounts
Liabilities						
Financial instruments at fair value through profit or loss						
Securities	75,189		75,189			75,189
Deposits and repurchase agreements	304,202	(100,163)	204,039	(36,754)	(153,961)	13,324
Issued debt securities	54,908		54,908			54,908
Derivative financial instruments (including derivatives used for hedging purposes)	475,521	(238,040)	237,481	(177,352)	(31,226)	28,903
Financial liabilities at amortised cost	875,530	(67)	875,463	(1,268)	(5,311)	868,884
of which repurchase agreements	*7,038*		*7,038*	*(1,268)*	*(5,311)*	*459*
Accrued expense and other liabilities	89,562		89,562		(24,764)	64,798
of which guarantee deposits received	*48,308*		*48,308*		*(24,764)*	*23,544*
Other liabilities not subject to offsetting	398,468		398,468			398,468
TOTAL LIABILITIES	**2,273,380**	**(338,270)**	**1,935,110**	**(215,374)**	**(215,262)**	**1,504,474**

In millions of euros, at 1 January 2018 IFRS 9 & IFRS 15	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments received as collateral	Net amounts
Assets						
Financial instruments at fair value through profit or loss						
Securities	130,326		130,326			130,326
Loans and repurchase agreements	276,134	(131,186)	144,948	(29,448)	(107,725)	7,775
Derivative financial instruments (including derivatives used for hedging purposes)	332,931	(89,314)	243,617	(177,227)	(27,164)	39,226
Financial assets at amortised cost	821,819	(861)	820,958	(492)	(1,818)	818,648
of which repurchase agreements	*2,330*		*2,330*	*(492)*	*(1,818)*	*20*
Accrued income and other assets	93,080	(119)	92,961		(31,947)	61,014
of which guarantee deposits paid	*56,452*		*56,452*		*(31,947)*	*24,505*
Other assets not subject to offsetting	516,968		516,968			516,968
TOTAL ASSETS	**2,171,258**	**(221,480)**	**1,949,778**	**(207,167)**	**(168,654)**	**1,573,957**

In millions of euros, at 1 January 2018 IFRS 9 & IFRS 15	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments given as collateral	Net amounts
Liabilities						
Financial instruments at fair value through profit or loss						
Securities	67,087		67,087			67,087
Deposits and repurchase agreements	305,831	(131,186)	174,645	(28,875)	(133,009)	12,761
Issued debt securities	50,490		50,490			50,490
Derivative financial instruments (including derivatives used for hedging purposes)	332,640	(89,314)	243,326	(177,227)	(34,126)	31,973
Financial liabilities at amortised cost	838,305	(861)	837,444	(1,065)	(4,954)	831,425
of which repurchase agreements	*6,182*		*6,182*	*(1,065)*	*(4,954)*	*163*
Accrued expense and other liabilities	80,591	(119)	80,472		(24,287)	56,185
of which guarantee deposits received	*38,918*		*38,918*		*(24,287)*	*14,631*
Other liabilities not subject to offsetting	391,762		391,762			391,762
TOTAL LIABILITIES	**2,066,706**	**(221,480)**	**1,845,226**	**(207,167)**	**(196,376)**	**1,441,683**

5.r TRANSFERS OF FINANCIAL ASSETS

Financial assets that have been transferred but not derecognised by the Group are mainly composed of securities sold temporarily under repurchase agreements or securities lending transactions, as well as securitised assets. The liabilities associated to securities temporarily sold under repurchase agreements consist of debts recognised under the “repurchase agreements” heading. The liabilities associated to securitised assets consist of the securitisation notes purchased by third parties.

- **Securities lending, repurchase agreements and other transactions:**

	31 December 2018 IFRS 9 & IFRS 15		1 January 2018 IFRS 9 & IFRS 15	
In millions of euros, at	Carrying amount of transferred assets	Carrying amount of associated liabilities	Carrying amount of transferred assets	Carrying amount of associated liabilities
Securities lending operations				
Financial instruments at fair value through profit or loss	6,838	-	4,738	-
Financial assets at amortised cost	801	-	801	-
Financial assets at fair value through equity	25	-	71	-
Repurchase agreements				
Financial instruments at fair value through profit or loss	34,871	34,699	28,658	27,930
Financial assets at amortised cost	627	624	2,371	2,371
Financial assets at fair value through equity	1,766	1,766	2,759	2,754
Financial investments of insurance activities	5,979	5,855	4,080	4,080
Total	**50,907**	**42,944**	**43,478**	**37,135**

- **Securitisation transactions partially refinanced by external investors, whose recourse is limited to the transferred assets:**

In millions of euros, at 31 December 2018 *IFRS 9 & IFRS 15*	Carrying amount of transferred assets	Carrying amount of associated liabilities	Fair value of transferred assets	Fair value of associated liabilities	Net position
Securitisation					
Financial instruments at fair value through profit or loss	163	163	163	163	-
Financial assets at amortised cost	14,050	12,913	14,227	12,916	1,311
Financial assets at fair value through equity	21	21	21	21	-
Total	**14,234**	**13,097**	**14,411**	**13,100**	**1,311**

In millions of euros, at 1 January 2018 *IFRS 9 & IFRS 15*	Carrying amount of transferred assets	Carrying amount of associated liabilities	Fair value of transferred assets	Fair value of associated liabilities	Net position
Securitisation					
Financial instruments at fair value through profit or loss	186	186	186	186	-
Financial assets at amortised cost	16,602	15,746	17,052	15,820	1,232
Financial assets at fair value through equity	23	23	23	23	-
Total	**16,811**	**15,955**	**17,261**	**16,029**	**1,232**

There have been no significant transfers leading to partial or full derecognition of the financial assets where the Bank has a continuing involvement in them.

6. FINANCING AND GUARANTEE COMMITMENTS

6.a FINANCING COMMITMENTS GIVEN OR RECEIVED

Contractual value of financing commitments given and received by the Group:

In millions of euros	31 December 2018 IFRS 9 & IFRS 15	1 January 2018 IFRS 9 & IFRS 15
Financing commitments given		
- to credit institutions	**3,201**	**2,153**
- to customers	**301,447**	**283,948**
Confirmed financing commitments	231,109	221,268
Other commitments given to customers	70,338	62,680
Total financing commitments given	**304,648**	**286,101**
of which stage 1	*292,425*	*271,773*
of which stage 2	*10,511*	*12,684*
of which stage 3	*644*	*909*
of which insurance activities	*1,068*	*735*
Financing commitments received		
- from credit institutions	**72,484**	**70,360**
- from customers	**11,244**	**3,208**
Total financing commitments received	**83,728**	**73,568**

6.b GUARANTEE COMMITMENTS GIVEN BY SIGNATURE

In millions of euros	31 December 2018 IFRS 9 & IFRS 15	1 January 2018 IFRS 9 & IFRS 15
Guarantee commitments given		
- to credit institutions	**33,487**	**33,114**
- to customers	**113,129**	**109,529**
Property guarantees	1,968	1,968
Sureties provided to tax and other authorities, other sureties	54,019	52,088
Other guarantees	57,142	55,473
Total guarantee commitments given	**146,616**	**142,643**
of which stage 1	*138,615*	*135,290*
of which stage 2	*6,713*	*6,385*
of which stage 3	*1,285*	*968*
of which insurance activities	*3*	*-*

6.c Securities commitments

In connexion with the settlement date accounting for securities (cf. note 2.a), commitments representing securities to be delivered or securities to be received are the following :

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Securities to be delivered	14,134	12,282
Securities to be received	12,869	6,241

6.d Other guarantee commitments

- **Financial instruments given as collateral:**

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Financial instruments (negotiable securities and private receivables) lodged with central banks and eligible for use at any time as collateral for refinancing transactions after haircut	**104,804**	**102,906**
- Used as collateral with central banks	35,216	35,457
- Available for refinancing transactions	69,588	67,449
Securities sold under repurchase agreements	**314,705**	**301,764**
Other financial assets pledged as collateral for transactions with credit institutions, financial customers or subscribers of covered bonds issued by the Group [(1)]	**124,148**	**146,322**

[(1)]Notably including "Société de Financement de l'Économie Française" and "Caisse de Refinancement de l'Habitat" financing.

The fair value of financial instruments given as collateral or transferred under repurchase agreements by the Group that the beneficiary is authorised to sell or reuse as collateral amounted to EUR 396,876 million at 31 December 2018 (EUR 408,380 million at 1 January 2018).

- **Financial instruments received as collateral:**

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*	1 January 2018 *IFRS 9 & IFRS 15*
Financial instruments received as collateral (excluding repurchase agreements)	**162,184**	**128,816**
of which instruments that the Group is authorised to sell and reuse as collateral	*82,543*	*102,543*
Securities received under repurchase agreements	**287,047**	**286,418**

The fair value of financial instruments received as collateral or under repurchase agreements that the Group effectively sold or reused as collateral amounted to EUR 268,973 million at 31 December 2018 (compared with EUR 272,788 million at 1 January 2018).

7. SALARIES AND EMPLOYEE BENEFITS

7.a SALARY AND EMPLOYEE BENEFIT EXPENSE

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Fixed and variable remuneration, incentive bonuses and profit-sharing	12,403	12,402
Employee benefit expense	3,665	3,542
Payroll taxes	549	552
Total salary and employee benefit expense	**16,617**	**16,496**

7.b POST-EMPLOYMENT BENEFITS

IAS 19 distinguishes between two categories of plans, each handled differently depending on the risk incurred by the entity. When the entity is committed to paying a fixed amount, stated as a percentage of the beneficiary's annual salary, for example, to an external entity handling payment of the benefits based on the assets available for each plan member, it is described as a defined-contribution plan. Conversely, when the entity's obligation is to manage the financial assets funded through the collection of contributions from employees and to bear the cost of benefits itself or to guarantee the final amount subject to future events, it is described as a defined-benefit plan. The same applies, if the entity entrusts management of the collection of premiums and payment of benefits to a separate entity, but retains the risk arising from management of the assets and/or from future changes in the benefits.

- **Defined-contribution pension plans for Group entities**

The BNP Paribas Group has implemented over the past few years a wide campaign of converting defined-benefit plans into defined-contribution plans.

Thus, in France, the BNP Paribas Group pays contributions to various nationwide basic and top-up pension schemes. BNP Paribas SA and certain subsidiaries have set up a funded pension plan under a company-wide agreement. Under this plan, employees will receive an annuity on retirement in addition to the pension paid by nationwide schemes.

Since defined-benefit plans have been closed to new employees in most countries outside France, they are offered the benefit of joining defined-contribution pension plans.

The amount paid into defined-contribution post-employment plans in the year ended 31 December 2018 was EUR 612 million, compared with EUR 616 million in the year ended 31 December 2017.

The breakdown by major contributors is determined as follows:

Contribution amount In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
France	334	315
Italy	63	60
UK	50	48
USA	40	45
Germany	4	8
Turkey	30	38
Others	91	102
TOTAL	**612**	**616**

In Italy, the plan introduced by BNL is funded by employer contributions (4.2% of salaries) and employee contributions (2% of salaries). Employees can also make additional voluntary contributions.

In the United Kingdom, the employer contributes 12% of salaries for the majority of employees; employees can make additional voluntary contributions.

In the US, the bank matches the voluntary contributions made by employees, within certain limits.

- **Main defined-benefit pension plans for Group entities, of which indemnities payable on retirement**

- Defined-benefit plans

In Belgium, BNP Paribas Fortis funds a defined-benefit plan, based on final salary and number of years of service, for its management and employees who joined the bank before its pension plans were harmonised on 1 January 2002. Actuarial liabilities under this scheme are pre-funded at 92 % at 31 December 2018 (compared with 90 % at 31 December 2017) through AG Insurance, in which the BNP Paribas Group owns a 25% equity interest.

BNP Paribas Fortis senior managers are covered by a top-up pension plan, paying a lump sum based on the number of years of service and final salary. This plan is pre-funded at 96 % as at 31 December 2018 (97 % at 1 January 2018) through insurance companies. Since 1 January 2015, senior managers benefit from a defined-contribution scheme.

The other employees benefit as well from the defined-contribution scheme.

Since there is a legal obligation for the employer to guarantee a minimum return on financial assets invested under defined-benefit pension plans, a provision was recognised for these defined-contribution schemes, as this guarantee is not entirely covered by the insurance company.

In France, BNP Paribas pays a top-up banking industry pension arising from rights acquired to 31 December 1993 by retired employees and active employees in service at that date. At 31 December 2018, the Group's residual obligations for these employees were recognised on the balance sheet in full.

The defined-benefit plans previously granted to some Group senior managers have all been closed to new employees and converted into top-up type schemes. The amounts allocated to residual beneficiaries, subject to their presence within the Group at retirement, were fixed when these schemes were closed. At 31 December 2018, 110 % of these pension plans were funded through insurance companies (118 % at 31 December 2017).

In the United Kingdom, defined-benefit pension plans (pension funds) still exist but are closed to new employees. Under these plans, the defined pension is generally based on final salary and number of years of service. Pension schemes are managed by independent management bodies (Trustees). At 31 December 2018, obligations for all UK entities were 115 % covered by financial assets, compared with 107 % at 31 December 2017.

In Switzerland, liabilities relate to top-up pension plans based on the principle of defined-contribution schemes with guaranteed returns, paying an annuity under pre-defined terms. These schemes are managed by a foundation. At 31 December 2018, obligations were 89 % covered by financial assets, compared with 90 % at 31 December 2017.

In the United States, defined-benefit pension plans are based on annual vesting rights to a lump sum comprising a pension expressed as a percentage of annual salary and paying interest at a pre-defined rate. These plans are closed to new entrants and have offered almost no new vesting rights since 2012. At 31 December 2018, the obligation was 83 % covered by financial assets, (71 % at 31 December 2017).

In Germany, liabilities are mainly related to defined-benefit pension plans, closed to new employees. Under these plans, the defined pension is generally based on the number of years of service and final salary. They offer the payment of an annuity under pre-defined terms. At 31 December 2018, the obligation was 59 % covered by financial assets, (58 % at 31 December 2017).

In Turkey, the pension plan replaces the national pension scheme (these obligations are measured based on the terms of the eventual transfer to the Turkish State) and offers guarantees exceeding the minimal legal requirements. At the end of 2018, obligations under this plan are fully funded by financial assets held with an external foundation; these financial assets exceed the related obligations, but this surplus is not recognised as an asset by the Group.

- Other post-employment benefits

Group employees also receive various other contractual post-employment benefits, such as indemnities payable on retirement, determined according to minimal legal requirements (Labour Code, collective agreements) or according to specific company-level agreements.

In France, the obligations for these benefits are funded through a contract held with a third-party insurer. At 31 December 2018, this obligation was 100 % covered by financial assets, compared with 98 % at 31 December 2017.

In other countries, the gross obligations of the Group related to these benefits are mainly concentrated in Italy. They are representative of rights vested up to 31 December 2006, when pension reforms changed Italian termination indemnity schemes into defined-contribution plans.

- **Obligations under defined-benefit plans and other post-employment benefits**

\- Assets and liabilities recognised on the balance sheet

In millions of euros, at 31 December 2018	*Defined-benefit obligation arising from wholly or partially funded plans*	*Defined-benefit obligation arising from unfunded plans*	Present value of defined-benefit obligation	Fair value of plan assets	Fair value of reimbursement rights [(1)]	Effect of asset ceiling	Net obligation	*of which asset recognised in the balance sheet for defined-benefit plans*	*of which net assets of defined-benefit plans*	*of which fair value of reimbursement rights*	*of which obligation recognised in the balance sheet for defined-benefit plans*
Belgium	*3,049*	*21*	3,070	(93)	(2,838)		139	(2,838)		*(2,838)*	2,977
UK	*1,488*	*1*	1,489	(1,716)			(227)	(234)	*(234)*		7
France	*1,193*	*106*	1,299	(1,201)			98	(61)	*(61)*		159
Switzerland	*1,090*	*9*	1,099	(976)			123				123
USA	*538*	*77*	615	(510)			105				105
Italy		*357*	357				357				357
Germany	*121*	*60*	181	(108)			73				73
Turkey	*140*	*29*	169	(366)		226	29				29
Others	*503*	*41*	544	(381)	(1)		162	(6)	*(5)*	*(1)*	168
TOTAL	*8,122*	*701*	8,823	(5,351)	(2,839)	226	859	(3,139)	*(300)*	*(2,839)*	3,998

In millions of euros, at 01 January 2018	*Defined-benefit obligation arising from wholly or partially funded plans*	*Defined-benefit obligation arising from unfunded plans*	Present value of defined-benefit obligation	Fair value of plan assets	Fair value of reimbursement rights [(1)]	Effect of asset ceiling	Net obligation	*of which asset recognised in the balance sheet for defined-benefit plans*	*of which net assets of defined-benefit plans*	*of which fair value of reimbursement rights*	*of which obligation recognised in the balance sheet for defined-benefit plans*
Belgium	*3,182*	*21*	3,203	(70)	(2,930)		203	(2,930)		*(2,930)*	3,133
UK	*1,681*	*1*	1,682	(1,802)			(120)	(130)	*(130)*		10
France	*1,225*	*117*	1,342	(1,223)			119	(50)	*(50)*		169
Switzerland	*1,059*	*10*	1,069	(951)			118				118
USA	*634*	*179*	813	(575)			238	(6)	*(6)*		244
Italy		*368*	368				368				368
Germany	*122*	*60*	182	(110)			72				72
Turkey	*270*	*27*	297	(422)		152	27				27
Others	*481*	*134*	615	(421)	(1)		193	(5)	*(4)*	*(1)*	198
TOTAL	*8,654*	*917*	9,571	(5,574)	(2,931)	152	1,218	(3,121)	*(190)*	*(2,931)*	4,339

[(1)] The reimbursement rights are principally found on the balance sheet of the Group's insurance subsidiaries and associated companies - notably AG Insurance with respect to BNP Paribas Fortis' defined-benefit plan - to hedge their commitments to other Group entities that were transferred to them to cover the post-employment benefits of certain employee categories.

- Change in the present value of the defined-benefit obligation

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Present value of defined-benefit obligation at start of period	**9,571**	**9,831**
Current service cost	236	257
Interest cost	136	147
Past service cost	(17)	(1)
Settlements	(32)	(7)
Actuarial (gains)/losses on change in demographic assumptions	(36)	(58)
Actuarial (gains)/losses on change in financial assumptions	(400)	210
Actuarial (gains)/losses on experience gaps	50	51
Actual employee contributions	24	24
Benefits paid directly by the employer	(110)	(106)
Benefits paid from assets/reimbursement rights	(455)	(479)
Exchange rate (gains)/losses on obligation	(11)	(352)
(Gains)/losses on obligation related to changes in the consolidation scope	(133)	54
Present value of defined-benefit obligation at end of period	**8,823**	**9,571**

- Change in the fair value of plan assets and reimbursement rights

	Plan assets		Reimbursement rights	
In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Fair value of assets at start of period	**5,574**	**5,572**	**2,931**	**2,926**
Expected return on assets	103	109	27	28
Settlements	(50)	(1)		
Actuarial gains/(losses) on assets	(56)	214	(64)	149
Actual employee contributions	14	14	10	10
Employer contributions	142	139	141	89
Benefits paid from assets	(248)	(259)	(206)	(220)
Exchange rate gains/(losses) on assets	(67)	(329)		
Gains/(losses) on assets related to changes in the consolidation scope	(61)	115		(51)
Fair value of assets at end of period	**5,351**	**5,574**	**2,839**	**2,931**

- Components of the cost of defined-benefit plans

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Service costs	**237**	**250**
Current service cost	236	257
Past service cost	(17)	(1)
Settlements	18	(6)
Net financial expense	**19**	**26**
Interest cost	136	147
Interest income on plan asset	13	16
Interest income on reimbursement rights	(103)	(109)
Expected return on asset ceiling	(27)	(28)
Total recognised in salary and employee benefit expense	**256**	**276**

- Other items recognised directly in equity

In millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Other items recognised directly in equity	**147**	**194**
Actuarial (losses)/gains on plan assets or reimbursement rights	(120)	363
Actuarial (losses)/gains of demographic assumptions on the present value of obligations	36	58
Actuarial (losses)/gains of financial assumptions on the present value of obligations	400	(210)
Experience (losses)/gains on obligations	(50)	(51)
Variation of the effect of assets limitation	(119)	34

- Main actuarial assumptions used to calculate obligations

In the Eurozone, United Kingdom and United States, the Group discounts its obligations using the yields of high quality corporate bonds, with a term consistent with the duration of the obligations.

The ranges of rates used are as follows:

In %	31 December 2018		31 December 2017	
	Discount rate	Compensation increase rate [(1)]	Discount rate	Compensation increase rate [(1)]
Belgium	0,80% / 1,80%	2,90% / 3,40%	0,60% / 1,90%	2,90% / 3,40%
UK	1,80% / 3,00%	2,00% / 3,55%	1,50% / 2,70%	2,00% / 4,70%
France	0,40% / 1,80%	2,05% / 3,30%	0,50% / 1,30%	2,15% / 3,40%
Switzerland	0,00% / 0,90%	1,40% / 1,50%	0,00% / 0,80%	1,40% / 1,50%
USA	3,50% / 4,45%	4.00%	2,25% / 3,75%	4.00%
Italy	0,80% / 1,80%	1,80% / 3,10%	0,50% / 1,80%	1,80% / 2,70%
Germany	1,40% / 1,90%	2,00% / 3,00%	1,30% / 1,80%	2,00% / 3,00%
Turkey	16.70%	12.20%	11.80%	6.00%

[(1)] Including price increases (inflation)

Observed weighted average rates are as follows:

- In the Eurozone: 1.30% at 31 December 2018 (1.06% at 31 December 2017),
- In the United Kingdom: 2.81% at 31 December 2018 (2.41% at 31 December 2017),
- In Switzerland: 0.89% at 31 December 2018 (0.60% at 31 December 2017).

The impact of a 100 bp change in discount rates on the present value of post-employment benefit obligations is as follows:

Change in the present value of obligations In millions of euros	31 December 2018		31 December 2017	
	Discount rate -100bp	Discount rate +100bp	Discount rate -100bp	Discount rate +100bp
Belgium	306	(250)	309	(286)
UK	325	(243)	389	(286)
France	144	(121)	144	(122)
Switzerland	187	(145)	105	(143)
USA	69	(57)	95	(82)
Italy	26	(25)	27	(28)
Germany	37	(28)	39	(27)
Turkey	15	(12)	10	(8)

- Actual rate of return on plan assets and reimbursement rights over the period

In %	Year to 31 Dec. 2018		Year to 31 Dec. 2017	
	Range of value *(reflecting the existence of several plans in the same country)*	Weighted average rates	Range of value *(reflecting the existence of several plans in the same country)*	Weighted average rates
Belgium	-2,00% / 4,65%	-0.4%	1,25% / 5,90%	2.94%
UK	-3,80% / 5,70%	-3.05%	2,30% / 9,70%	6.55%
France	3,55%	3.55%	3.65%	3.65%
Switzerland	-2,00% / 2,80%	-0.66%	6,95% / 7,85%	6.96%
USA	-4,55% / 1,50%	-0.50%	8,40% / 14,20%	11.37%
Germany	-6,50% / 1,80%	-3.23%	-1,80% / 2,90%	1.070%
Turkey	13.10%	13.10%	10.55%	10.55%

- Breakdown of plan assets

In %	31 December 2018						31 December 2017					
	Shares	Governmental bonds	Non-Governmental bonds	Real-estate	Deposit account	Others	Shares	Governmental bonds	Non-Governmental bonds	Real-estate	Deposit account	Others
Belgium	6%	52%	19%	1%	0%	22%	7%	52%	19%	1%	0%	21%
UK	16%	63%	9%	0%	3%	9%	26%	56%	9%	0%	1%	8%
France(1)	7%	67%	18%	8%	0%	0%	6%	68%	18%	8%	0%	0%
Switzerland	31%	29%	4%	20%	1%	15%	32%	29%	4%	18%	2%	15%
USA	26%	44%	14%	0%	11%	5%	33%	36%	18%	0%	8%	5%
Germany	28%	61%	0%	0%	2%	9%	28%	62%	0%	0%	1%	9%
Turkey	0%	0%	0%	5%	94%	1%	0%	0%	0%	5%	93%	2%
Others	10%	11%	12%	1%	6%	60%	9%	13%	11%	1%	15%	51%
GROUP	**13%**	**49%**	**13%**	**4%**	**6%**	**15%**	**16%**	**46%**	**14%**	**4%**	**6%**	**14%**

(1)In France, the breakdown of plan assets reflects the breakdown of the general fund of the insurance company through which the Group's obligations are funded.

The Group introduced an asset management governance for assets backing defined-benefit pension plan commitments, the main objectives of which are the management and control of the risks in terms of investment.

It sets out investment principles, in particular, by defining an investment strategy for plan assets, based on financial objectives and financial risk management, to specify the way in which plan assets have to be managed, via financial management servicing contracts.

The investment strategy is based on an assets and liabilities management analysis that should be realised at least every three years for plans with assets in excess of EUR 100 million.

- **Post-employment healthcare benefits**

The Group offers some healthcare benefit plans for retired employees, mainly in the United States and Belgium. These plans are mainly closed to new entrants.

At the end of 2018, the healthcare benefit plan of Bank of the West in the United States was closed, rights have been frozen and conditions of eligibility have been modified for some employees.

The present value of post-employment healthcare benefit obligations stood at EUR 131 million at 31 December 2018, compared with EUR 143 million at 31 December 2017, i.e. a decrease of EUR 12 million in 2018, of which +EUR 1 million recognised directly in shareholders' equity.

7.c OTHER LONG-TERM BENEFITS

BNP Paribas offers its employees various long-term benefits, mainly long-service awards, the ability to save up paid annual leave in time savings accounts, and certain guarantees protecting them in the event they become incapacitated. The net provision amounted to EUR 462 million at 31 December 2018 (unchanged from 31 December 2017).

As part of the Group's variable compensation policy, annual deferred compensation plans are set up for certain high-performing employees or pursuant to special regulatory frameworks. Under these plans, payment is deferred over time and is subject to the performance achieved by the business lines, divisions and Group.

Since 2013, BNP Paribas has introduced a Group loyalty scheme with a cash payment, at the end of a three-year vesting period, which fluctuates according to the Group's intrinsic performance. The aim of this loyalty scheme is to make different categories of managerial staff partners in the Group's development and profitability objectives. These personnel are representative of the Group's talent and the breadth of its managerial framework i.e. senior managers, managers in key positions, line managers and experts, high-potential managers, high-performing young executives with good career development prospects and key contributors to the Group's results.

The amounts allocated under this plan are linked to changes in the Group's operational performance over three years (for 80%) and to the achievement of the Group's Corporate Social Responsibility (CSR) targets (for 20%). These nine targets are in line with the four pillars on which the Group's CSR policy is based. In addition, the final payment is subject to continuous service within the Group between the grant date and the payment date, provided that the Group's operating income and pre-tax income for the year prior to payment are strictly positive. For employees subject to special regulatory frameworks, this loyalty scheme is adjusted in accordance with the CRD4 European Directive.

The net obligation related to deferred compensation plans and loyalty schemes amounts to EUR 579 million at 31 December 2018 (EUR 619 million at 31 December 2017).

In millions of euros	31 December 2018	31 December 2017
Net provisions for other long-term benefits	**1,040**	**1,081**
Asset recognised in the balance sheet under the other long-term benefits	(80)	(89)
Obligation recognised in the balance sheet under the other long-term benefits	1,120	1,170

7.d Termination benefits

BNP Paribas has implemented a number of voluntary redundancy plans and headcount adaptation plans for employees who meet certain eligibility criteria. The obligations to eligible active employees under such plans are provided for as soon as a bilateral agreement or a bilateral agreement proposal for a particular plan is made.

In 2016, in France, CIB activities in BNP Paribas SA and BNP Paribas Arbitrage have set up in their respective scope a 3-year voluntary redundancy plan (from October 2016 to December 2018).

In millions of euros	31 December 2018	31 December 2017
Provision for voluntary departure, early retirement plans, and headcount adaptation plans	380	389

7.e Share-based payments

SHARE-BASED LOYALTY, COMPENSATION AND INCENTIVE SCHEMES

Until 2012, BNP Paribas set up several share-based payment schemes for certain employees: performance shares plans and stock subscription or purchase plans.

After 2012, only some cash-settled long term compensation plans are still share price-linked, especially for employees whose activities are likely to have an impact on the Group's risk exposure.

- **Deferred share price-linked, cash-settled compensation plans**

As part of the Group's variable remuneration policy, deferred annual compensation plans offered to certain high-performing employees or set up pursuant to special regulatory frameworks may entitle beneficiaries to variable compensation settled in cash but linked to the share price, payable over several years.

- Variable compensation for employees, subject to special regulatory frameworks

  Since the publication of the Decree by the French ministry of finance on 13 December 2010, and following the provisions of the European Directive CRD4 of 26 July 2013 transposed into the French law in the Monetary and Financial Code by the Order of 20 February 2014 as well as the Decrees and Orders of 3 November 2014 and the delegated European regulation of 4 March 2014, the variable compensation plans apply to Group employees performing activities that may have a material impact on the Group's risk profile.

  Under these plans, payment is deferred over time and is contingent on the performance achieved by the business lines, core businesses and Group.

  Sums will mostly be paid in cash linked to the increase or decrease in the BNP Paribas share price.

- Deferred variable compensation for other Group employees

  Sums due under the annual deferred compensation plans for high-performing employees are partly paid in cash linked to the increase or decrease in the BNP Paribas share price.

- **Global Share-Based Incentive Plan (until 2012)**

BNP Paribas set up a Global Share-Based Incentive Plan for some Group employees, including stock options and performance share awards.

The option exercise price under these plans is determined at the time of issuance and no discount is offered. The duration of the options granted is 8 years.

Performance shares awarded between 2009 and 2012 vest after a period of 3 or 4 years, depending on the case and provided that the employee is still a member of the Group. The compulsory holding period for performance shares is two years for France-based employees.

Since 2010, the conditional portion granted had been set at 100% of the total award for members of the BNP Paribas Group Executive Committee and senior managers and 20% for other beneficiaries.

Under stock option plans set up between 2003 and 2011, the performance condition was not fully met on seven out of thirty occasions and the adjustments described above were therefore implemented. Under performance share plans awarded between 2009 and 2012, the performance condition was not met on three out of ten occasions and the relevant contingent portion therefore lapsed.

All unexpired plans settle in a potential subscription of BNP Paribas shares.

- **Valuation of stock option plans and performance share plans**

As required under IFRS 2, BNP Paribas attributes a value to stock options and performance shares granted and recognises an expense, determined at the date of grant, calculated respectively on the basis of the fair value of the options and shares concerned. This initial fair value may not subsequently be adjusted for changes in the quoted market price of BNP Paribas shares. The only assumptions that may result in a revision of the fair value during the vesting period, and hence an adjustment in the expense, are those related to the population of beneficiaries (loss of rights) and internal performance conditions. The Group's share-based payment plans are valued by an independent specialist firm.

- **History of plans granted under the Global Share-Based Incentive Plan**

The tables below give details of the characteristics and terms of all unexpired plans at 31 December 2018:

- Stock subscription option plans

Characteristics of the plan							Options outstanding at end of period	
Originating company	Date of grant	Number of grantees	Number of options granted	Start date of exercise period	Option expiry date	Adjusted exercise price *(in euros)*	Number of options	Remaining period until expiry of options (years)
BNP Paribas SA [(1)]	05/03/2010	1,820	2,423,700	05/03/2014	02/03/2018	51.20	-	-
BNP Paribas SA [(1)]	04/03/2011	1,915	2,296,820	04/03/2015	04/03/2019	56.45	1,296,508	0.2
Total options outstanding at end of period							**1,296,508**	

[(1)] The plan is subject to vesting conditions under which a proportion of the options granted to employees is conditional upon the performance of the BNP Paribas share relative to the Dow Jones EURO STOXX Banks index during the applicable holding period.
Based on this relative performance condition, the adjusted exercise price for these options has been set at EUR 67.74 instead of EUR 56.45 for 207,128 options under the 4 March 2011 plan, outstanding at the year-end.

- Performance share plans

At 31 December 2018, 311 BNP Paribas SA shares granted via performance share plans from 2009 to 2012 were not yet delivered to their beneficiaries.

- **Movements over the past two years**

	Year to 31 Dec. 2018		Year to 31 Dec. 2018	
	Number of options	Weighted average exercise price (in euros)	Number of options	Weighted average exercise price (in euros)
Options outstanding at 1 January	2,277,443	55.61	4,176,666	51.98
Options exercised during the period	(939,175)	52.07	(1,856,733)	47.64
Options expired during the period	(41,760)		(42,490)	
Options outstanding at 31 December	1,296,508	58.25	2,277,443	55.61
Options exercisable at 31 December	1,296,508	58.25	2,277,443	55.61

The average quoted stock market price in 2018 is EUR 64.89 (EUR 62.82 in 2017).

- **Expense of share-based payment**

Expense / (revenue) in millions of euros	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Prior deferred compensation plans	(204)	82
Deferred compensation plans for the year	195	345
Total	(9)	427

8. ADDITIONAL INFORMATION

8.a CHANGES IN SHARE CAPITAL AND EARNINGS PER SHARE

At 31 December 2018, the share capital of BNP Paribas SA amounted to EUR 2,499,597,122, and was divided into 1,249,798,561 shares. The nominal value of each share is EUR 2. At 31 December 2017, the share capital amounted to EUR 2,497,718,772 euros and was divided into 1,248,859,386 shares.

- **Ordinary shares issued by BNP Paribas and held by the Group**

	Proprietary transactions		Trading transactions (1)		Total	
	Number of shares	Carrying amount (in millions of euros)	Number of shares	Carrying amount (in millions of euros)	Number of shares	Carrying amount (in millions of euros)
Shares held at 31 December 2016	**785,318**	**41**	**114,718**	**7**	**900,036**	**48**
Acquisitions	320,794	20			320,794	20
Disposals	(297,794)	(18)			(297,794)	(18)
Shares delivered to employees	(576)				(576)	
Other movements			(272,895)	(17)	(272,895)	(17)
Shares held at 31 December 2017	**807,742**	**43**	**(158,177)**	**(10)**	**649,565**	**33**
Acquisitions	513,568	31			513,568	31
Disposals	(594,068)	(36)			(594,068)	(36)
Shares delivered to employees	(791)				(791)	
Other movements			1,649,512	69	1,649,512	69
Shares held at 31 December 2018	**726,451**	**38**	**1,491,335**	**59**	**2,217,786**	**97**

(1) Transactions realised in the framework of an activity of trading and arbitrage transactions on equity indices.

At 31 December 2018, the BNP Paribas Group was a holder of 2,217,786 BNP Paribas shares representing an amount of EUR 97 million, which was recognised as a decrease in equity.

Under the Bank's market-making agreement relating to the BNP Paribas share on the Italian market made with Exane BNP Paribas, and in line with the Code of Ethics recognised by the AMF, the Bank bought back 513,568 shares in 2018 at an average share price of EUR 60.74, and sold the residual portfolio of 594,068 shares, at an average share price of EUR 59.33, which terminated this market-making agreement.

From 1 January 2018 to 31 December 2018, 791 shares were delivered following the definitive award of performance shares to their beneficiaries.

- **Preferred shares and Undated Super Subordinated Notes eligible as Tier 1 regulatory capital**

- Preferred shares issued by the Group's foreign subsidiaries

BNP Paribas Personal Finance made in 2004 two issues of undated non-voting preferred shares through a structured entity governed by UK law and which is exclusively controlled. Since the first call date, these preferred shares are redeemable at par at the issuer's discretion at each quarterly coupon date.

Issuer	Date of issue	Currency	Amount (in millions of euros)	Rate and term before 1st call date		Rate after 1st call date
Cofinoga Funding II LP	January and May 2004	EUR	80	TEC 10 (1) +1.35%	10 years	TEC 10 (1) + 1.35%
Total at 31 December 2018			**73(2)**			

(1) TEC 10 is the daily long-term government bond index, corresponding to the yield-to-maturity of a fictitious 10-year Treasury note.
(2) Value at the date of acquisition of control over the LaSer group.

These issues and the related dividends are recorded under "Minority interests" in the balance sheet.

- Undated Super Subordinated Notes issued by BNP Paribas SA

BNP Paribas has issued Undated Super Subordinated Notes which pay a fixed, fixed adjustable or floating rate coupon and are redeemable at the end of a fixed period and thereafter at each coupon date or every five years. If the notes are not redeemed at the end of this period, some of these issues will pay a coupon indexed to Euribor, Libor or a swap rate.

On 13 April 2017, BNP Paribas SA redeemed the April 2007 issue for a total amount of EUR 638 million at the first call date. These notes paid a 5.019% fixed-rate coupon.

On 23 October 2017, BNP Paribas SA redeemed the October 2007 issue, for an amount of GBP 200 million, at the first call date. These notes paid a 7.436% fixed-rate coupon.

On 15 November 2017, BNP Paribas SA has issued Undated Super Subordinated Notes for an amount of USD 750 million which pay a 5.125% fixed-rate coupon. These notes could be redeemed at the end of a period of 5 years. If the notes are not redeemed in 2022, a 5-year dollar swap rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 2 July 2018, BNP Paribas redeemed the June 2008 issue for a total amount of EUR 500 million, at the first call date. These notes paid a 7.781% fixed-rate coupon.

On 16 August 2018, BNP Paribas SA has issued Undated Super Subordinated Notes for an amount of USD 750 million which pay a 7% fixed-rate coupon. These notes could be redeemed at the end of a period of 10 years. If the notes are not redeemed in 2028, a 5-year dollar swap rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 18 September 2018, BNP Paribas SA redeemed the September 2008 issue for an amount of EUR 100 million, at the first call date. These notes paid a 7.57% fixed-rate coupon.

The following table summarises the characteristics of these various issues:

Date of issue	Currency	Amount (in millions of currency units)	Coupon payment date	Rate and term before 1st call date		Rate after 1st call date
October 2005	EUR	1,000	annual	4.875%	6 years	4.875%
October 2005	USD	400	annual	6.250%	6 years	6.250%
July 2006	EUR	150	annual	5.450%	20 years	3-month Euribor + 1.920%
June 2007	USD	600	quarterly	6.500%	5 years	6.500%
June 2007	USD	1,100	semi-annual	7.195%	30 years	USD 3-month Libor + 1.290%
December 2009	EUR	2	quarterly	3-month Euribor + 3.750%	10 years	3-month Euribor + 4.750%
December 2009	EUR	17	annual	7.028%	10 years	3-month Euribor + 4.750%
December 2009	USD	70	quarterly	USD 3-month Libor + 3.750%	10 years	USD 3-month Libor + 4.750%
December 2009	USD	0.5	annual	7.384%	10 years	USD 3-month Libor + 4.750%
June 2015	EUR	750	semi-annual	6.125%	7 years	EUR 5-year swap + 5.230%
August 2015	USD	1,500	semi-annual	7.375%	10 years	USD 5-year swap + 5.150%
March 2016	USD	1,500	semi-annual	7.625%	5 years	USD 5-year swap + 6.314%
December 2016	USD	750	semi-annual	6.750%	5.25 years	USD 5-year swap +4.916%
November 2017	USD	750	semi-annual	5.125%	5 years	USD 5-year swap +2.838%
August 2018	USD	750	semi-annual	7.000%	10 years	USD 5-year swap + 3.980%
Total euro-equivalent historical value at 31 December 2018		**8,230**(1)				

(1) Net of shares held in treasury by Group entities

BNP Paribas has the option of not paying interest due on these Undated Super Subordinated Notes. Unpaid interest is not carried forward.

For the notes issued before 2015, the absence of coupon payment is conditional on the absence of dividend payment on BNP Paribas SA ordinary shares or on Undated Super Subordinated Note equivalents during the previous year. Interest due is payable once dividend payment on BNP Paribas SA ordinary shares resumes.

The contracts relating to these Undated Super Subordinated Notes contain a loss absorption clause. Under the terms of this clause, in the event of insufficient regulatory capital, the nominal value of the notes may be reduced in order to serve as a new basis for the calculation of the related coupons until the capital deficiency is made up and the nominal value of the notes is increased to its original amount.

The proceeds from these issues are recorded in equity under “Capital and retained earnings”. In accordance with IAS 21, issues denominated in foreign currencies are recognised at their historical value based on their translation into euros at the issue date. Interest on the instruments is treated in the same way as dividends.

At 31 December 2018, the BNP Paribas Group held EUR 16 million of Undated Super Subordinated Notes which were deducted from shareholders’ equity.

- **Earnings per share**

Basic earnings per share are calculated by dividing the net income for the period attributable to holders of ordinary shares by the weighted average number of ordinary shares outstanding during the period. The net income attributable to ordinary shareholders is determined by deducting the net income attributable to holders of preferred shares.

Diluted earnings per share correspond to the net income for the period attributable to holders of ordinary shares, divided by the weighted average number of shares outstanding as adjusted for the maximum effect of the conversion of dilutive equity instruments into ordinary shares. In-the-money stock subscription options are taken into account in the diluted earnings per share calculation, as are performance shares granted under the Global Share-based Incentive Plan. Conversion of these instruments would have no effect on the net income figure used in this calculation.

	Year to 31 Dec. 2018 *IFRS 9 et IFRS 15*	Year to 31 Dec. 2017 *IAS 39*
Net profit used to calculate basic and diluted earnings per ordinary share ***(in millions of euros)*** (1)	**7,159**	**7,537**
Weighted average number of ordinary shares outstanding during the year	**1,248,334,552**	**1,246,386,807**
Effect of potentially dilutive ordinary shares	311	296,592
- Stock subscription option plan	-	295,245
- Performance share attribution plan	311	1,347
Weighted average number of ordinary shares used to calculate diluted earnings per share	**1,248,334,863**	**1,246,683,399**
Basic earnings per share (in euros)	**5.73**	**6.05**
Diluted earnings per share (in euros)	**5.73**	**6.05**

(1) The net profit used to calculate basic and diluted earnings per share is the net profit attributable to equity shareholders, adjusted for the remuneration on the Undated Super Subordinated Notes issued by BNP Paribas SA (treated as preferred share equivalents), which for accounting purposes is handled as dividends, as well as the related foreign exchange impact recognised directly in shareholders' equity in case of repurchase.

The dividend per share paid in 2018 out of the 2017 net income amounted to EUR 3.02, compared with EUR 2.70 paid in 2017 out of the 2016 net income.

8.b CONTINGENT LIABILITIES : LEGAL PROCEEDINGS AND ARBITRATION

BNP Paribas (the "Bank") is party as a defendant in various claims, disputes and legal proceedings (including investigations by judicial or supervisory authorities) in a number of jurisdictions arising in the ordinary course of its business activities, including inter alia in connection with its activities as market counterparty, lender, employer, investor and taxpayer. While the Bank cannot predict the ultimate outcome of all pending and threatened legal and regulatory proceedings, the Bank reasonably believes that they are either without legal merit, can be successfully defended or that the outcome of these actions is not expected to result in a significant loss for the Bank.

The Bank and certain of its subsidiaries are defendants in several actions pending before the United States Bankruptcy Court Southern District of New York brought by the Trustee appointed for the liquidation of Bernard L. Madoff Investment Securities LLC ("BLMIS"). These actions, known generally as "clawback claims", are similar to those brought by the BLMIS Trustee against numerous institutions, and seek recovery of amounts allegedly received by the BNP Paribas entities from BLMIS or indirectly through BLMIS-related "feeder funds" in which BNP Paribas entities held interests. The BLMIS Trustee claims in these actions that the amounts which BNP Paribas entities received are avoidable and recoverable under the U.S. Bankruptcy Code and New York state law. In the aggregate, the amount initially sought to be recovered in these actions approximated USD 1.3 billion. BNP Paribas has substantial and credible defenses to these actions and is defending against them vigorously.

In two decisions dated 22 November 2016 and 3 October 2018, the Bankruptcy Court rejected most of the claims brought by the BLMIS Trustee against BNP Paribas entities. An appeal is ongoing as to the 22 November 2016 decision. Oral argument was heard by the Court of Appeals for the Second Circuit on 16 November 2018. The 3 October 2018 decision will be subject to appeal at the conclusion of that suit.

Various litigations and investigations are ongoing relating to the restructuring of the Fortis group, now Ageas, of which BNP Paribas Fortis is no longer part, and to events having occurred before BNP Paribas Fortis became part of the BNP Paribas Group. Among these are litigations brought by shareholders groups in The Netherlands and Belgium against Ageas and, among others, against BNP Paribas Fortis, in relation to its role as global coordinator of Fortis (now Ageas)'s capital increase in October 2007 to partly finance its acquisition of ABN Amro Bank N.V.. These shareholders groups mainly allege that there has been a breach in financial communication, regarding, inter alia, the disclosure on the exposure to subprime mortgages. On 13 July 2018, the Amsterdam Court of Appeal has declared binding a settlement between Ageas and representatives of certain shareholders groups who held shares between 28 February 2007 and 14 October 2008. On 21 December 2018, Ageas indicated that it waived its right to terminate the settlement.

BNP Paribas Fortis is one of the releasees under the Ageas Settlement. This means that each eligible shareholder which has not opted out will be deemed to have fully released BNP Paribas Fortis from any claim regarding the events during this time. Litigation was also brought in Belgium by minority shareholders of Fortis against the Société fédérale de Participations et d'Investissement, Ageas and BNP Paribas seeking (amongst other things) damages from BNP Paribas as restitution for part of the BNP Paribas Fortis shares that were contributed to BNP Paribas in 2009, on the ground that the transfer of these shares was null and void. On 29 April 2016 the Brussels Commercial court decided to stay the proceedings until the resolution of the pending Fortis criminal proceeding in Belgium. BNP Paribas does not have tangible elements to assess the duration of such suspension.

Like many other financial institutions in the banking, investment, mutual funds and brokerage sectors, the Bank has received or may receive requests for information from supervisory, governmental or self-regulated agencies. The Bank responds to such requests, and cooperates with the relevant authorities and regulators and seeks to address and remedy any issues they may raise.

Regulatory and law enforcement authorities in multiple jurisdictions are conducting investigations or making inquiries of a number of financial institutions regarding trading on the foreign exchange markets. The Bank has been cooperating with the investigations and inquiries and has reponded to the information requests. Regarding the United States, on 24 May 2017, the New York Department of Financial Services ("DFS") announced that it had fined the Bank USD 350 million as part of a consent order for violations of New York banking law arising out of the Bank's global foreign exchange business. On 17 July 2017 the Board of Governors of the Federal Reserve System ("FED") announced that it had fined the Bank and certain of its US subsidiaries USD 246 million as part of a consent order for unsafe and unsound practices in the foreign exchange market. Under these respective consent orders, the Bank has also agreed to improve its internal policies and controls relating to its foreign exchange business and to certain designated market activities, with regard to the FED order. On 25 January 2018, BNP Paribas USA Inc. accepted to plead guilty in front of the U.S. District Court for the Southern District of New York to a single violation of the Sherman Antitrust Act. On 30 May 2018, the court imposed the sentence, as jointly recommended in the plea agreement between BNP Paribas USA Inc. and the Department of Justice ("DOJ"), consisting of (1) a fine of USD 90 million; (2) no probation, and (3) no order of restitution. In reaching the plea agreement with BNP Paribas USA Inc., the DOJ has noted the Bank's substantial efforts relating to compliance and remediation to address and prevent the re-occurrence through its compliance and remediation program of the issues arising from its FX trading business. On 29 August 2018, the U.S. Commodity Futures Trading Commission ("CFTC") announced the imposition of a civil penalty of USD 90 million on and paid by BNP Paribas Securities Corp. as part of a consent order following an investigation in connection with the USD ISDAFIX benchmark. The findings of the order were neither admitted nor denied by BNP Paribas Securities Corp. which, the CFTC noted in its order, had engaged in "significant remedial action [...] independent of the Commission's investigation".

The U.S. regulatory and law enforcement authorities are currently investigating or requesting information in relation to certain activities as reported in the international financial press in relation to the U.S. treasuries market and U.S. Agency bonds. The Bank, which has received some requests for information, is cooperating with investigations and is responding to requests for information. The outcome and potential impact of these investigations or requests for information is difficult to predict before their close and the subsequent discussions with the U.S. authorities. It should be noted that it has been reported that a number of financial institutions are involved in these investigations or requests for information and that it is sometimes the case that reviews carried out in connection therewith may lead to settlements including in particular the payment of fines or significant penalties depending on the circumstances specific to each situation.

8.c BUSINESS COMBINATIONS AND LOSS OF CONTROL

- **Operations realised in 2018**

  - **First Hawaiian Inc.**

On 4 August 2016, BNP Paribas Group launched an initial public offering on its First Hawaiian Inc (FHI) subsidiary on the US market.

Subsequently, four partial sales were made.

Date	Operation	Interest sold	Residual interest held	Control / Significant influence
4 August 2016	Initial offering	17.4%	82.6%	Control
6 February 2017	1st secondary offering	20.6%	62.0%	Control
8 May 2018	2nd secondary offering	13.2%	48.8%	Control
31 July 2018	3rd secondary offering	15.5%	33.3%	Significant influence
5 September 2018	4th secondary offering	14.9%	18.4%	Significant influence
31 December 2018		**81.6%**	**18.4%**	**Significant influence**

The first three operations resulted in an increase in the Group's retained earnings of EUR 422 million and in minority interests of EUR 1.363 million.

As at 30 June 2018, the Group considered the loss of control within one year to be highly probable and applied the provisions of IFRS 5 on groups of assets and liabilities held for sale.
The application of IFRS 5 had the effect of splitting the BancWest homogeneous group of businesses and, as a result, the related goodwill (i.e. EUR 4.3 billion) between Bank of the West (BoW) and FHI. This split was determined based on the recoverable amounts of the First Hawaiian Bank and BoW activities, and led to the allocation of a EUR 1.3 billion goodwill to FHI.
In addition, assets and liabilities have been reclassified respectively as non-current assets held for sale and liabilities related to non-current assets held for sale.

Following the sale of 31 July 2018, the Group ceased to exercise exclusive control over FHI but retained a significant influence. This loss of control resulted in a decrease of EUR 17.4 billion in the Group's balance sheet and a decrease in retained earnings attributable to minority shareholders of EUR 1.473 million.
This operation and the last partial sale generated an overall gain of EUR 286 million before tax, recognised in the profit and loss acount.

As at 31 December 2018, the Group continues to apply the provisions of IFRS 5.
The effect of IFRS 5 is to assess the equity-method value at the balance sheet date at the lowest value between the book value and the market value. At 31 December 2018, this method resulted in the recognition of a EUR -125 million impairment.

On 29 January 2019, the Group announced the launch of a new secondary offering for 24.9 million ordinary shares of First Hawaiian Inc (FHI). As a result of this transaction, the BNP Paribas Group will have sold its entire 18.4% stake in FHI, which has no effect on the accounts as at 31 December 2018.

- **ABN Amro Bank Luxembourg**

On 3 September 2018, BGL BNP Paribas acquired 100% of ABN Amro Bank Luxembourg (private banking activity) and its subsidiary ABN Amro Life SA (insurance activity). As a result of this transaction, the BNP Paribas Group fully consolidates these activities.

The result of this acquisition is to increase the Group's balance sheet at acquisition date by EUR 5.1 billion, including loans and advances to customers for EUR 1.6 billion and financial investments of insurance activities for EUR 2.7 billion.

The goodwill linked to this operation amounts to EUR 39 million.

As at 31 December 2018, ABN Amro Bank Luxembourg merged into BGL BNP Paribas.

- **Raiffeisen Bank Polska**

On 31 October 2018, Bank BGZ BNP Paribas bought the "Core" banking activities of Raiffeisen Bank Polska from Raiffeisen Bank International.

This acquisition resulted in an increase in the Group's balance sheet at acquisition date of EUR 9.5 billion, including loans and advances to customers for EUR 4.3 billion and amortised-cost debt securities for EUR 3.9 billion.

The negative goodwill associated with this operation amounts to EUR 68 million.

- **Operations realised in 2017**

  - **Financière des Paiements Electroniques**

On 13 July 2017, BNP Paribas acquired an 89.2% stake in Financière des Paiements Electroniques, which provides the “Compte-Nickel” payments account. This acquisition led the BNP Paribas Group to fully consolidate this entity.

This acquisition resulted in a EUR 0.4 billion increase of the Group balance sheet at the purchase date.

The goodwill on Financière des Paiements Electroniques amounted to EUR 159 million.

  - **Opel Bank SA**

On 1 November 2017, BNP Paribas Personal Finance and Banque PSA Finance (PSA group) closed their joint acquisition of all European activities of GM Financial, covering existing brands Opel Bank, Opel Financial Services and Vauxhall Finance.

BNP Paribas holds 50 % of Open Bank SA, the parent company of the Opel Vauxhall Finance group purchased. This entity is under exclusive control by BNP Paribas and is fully consolidated.

This acquisition resulted in a EUR 10.2 billion increase of the Group balance sheet at the purchase date, of which a EUR 8.3 billion increase in Loans and advances to customers.

The negative goodwill on this acquisition amounts to EUR 15 million.

  - **Cargeas Assicurazioni**

On 28 December 2017, BNP Paribas Cardif obtained control of Italian non-life insurer Cargeas Assicurazioni, following the purchase of shares held by Ageas. BNP Paribas Group already had a significant influence on Cargeas Assicurazioni and this entity was consolidated under the equity method. This acquisition led to the full consolidation of this entity.

This acquisition resulted in a EUR 0.8 billion increase of the Group balance sheet at the purchase date.

The goodwill on Cargeas Assicurazioni amounted to EUR 57 million.

8.d MINORITY INTERESTS

In millions of euros	Capital and retained earnings	Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	Minority interests
Capital and retained earnings at 31 December 2016	**4,460**	**-**	**95**	**4,555**
Appropriation of net income for 2016	**(131)**			**(131)**
Share-based payment plans	2			2
Remuneration on preferred shares	(2)			(2)
Impact of internal transactions on minority shareholders	(1)			(1)
Movements in consolidation scope impacting minority shareholders	493			493
Acquisitions of additional interests or partial sales of interests	115		(11)	104
Change in commitments to repurchase minority shareholders' interests	(8)			(8)
Other movements	23			23
Changes in assets and liabilities recognised directly in equity	(6)		(210)	(216)
Net income for 2017	**448**			**448**
Interim dividend payments	(41)			(41)
Capital and retained earnings at 31 December 2017	**5,352**	**-**	**(126)**	**5,226**
Revised presentation (note 2.a)	30	(30)	-	-
Capital and retained earnings at 31 December 2017 revised presentation	**5,382**	**(30)**	**(126)**	**5,226**
IFRS 9 implementation impacts (note 2.b)	(67)	3	(36)	(100)
Capital and retained earnings at 1 January 2018	**5,315**	**(27)**	**(162)**	**5,126**
Appropriation of net income for 2017	**(160)**			**(160)**
Increases in capital and issues	4			4
Remuneration on preferred shares	(2)			(2)
Impact of internal transactions on minority shareholders	(6)			(6)
Movements in consolidation scope impacting minority shareholders	(1,454)	36	119	(1,299)
Acquisitions of additional interests or partial sales of interests	326	(9)	(10)	307
Change in commitments to repurchase minority shareholders' interests	(165)			(165)
Other movements	11			11
Changes in assets and liabilities recognised directly in equity	-	17	(21)	(4)
Net income for 2018	**479**			**479**
Interim dividend payments	(32)			(32)
Capital and retained earnings at 31 December 2018	**4,316**	**17**	**(74)**	**4,259**

- **Main minority interests**

The assessment of the material nature of minority interests is based on the contribution of the relevant subsidiaries to the Group balance sheet (before elimination of intra-group balances and transactions) and to the Group profit and loss account.

	31 December 2018	Year to 31 Dec. 2018						
In millions of euros	Total assets before elimination of intra-group transactions	Revenues	Net income	Net income and changes in assets and liabilities recognised directly in equity	Minority shareholders' interest (%)	Net income attributable to minority interests	Net income and changes in assets and liabilities recognised directly in equity - attributable to minority interests	Dividends paid to minority shareholders
Contribution of the entities belonging to the BGL BNP Paribas group	84,655	1,519	451	397	34%	145	121	61
Other minority interests						334	354	133
TOTAL						479	475	194

	1 January 2018	Year to 31 Dec. 2017						
In millions of euros	Total assets before elimination of intra-group transactions	Revenues	Net income	Net income and changes in assets and liabilities recognised directly in equity	Minority shareholders' interest (%)	Net income attributable to minority interests	Net income and changes in assets and liabilities recognised directly in equity - attributable to minority interests	Dividends paid to minority shareholders
Contribution of the entities belonging to the BGL BNP Paribas group	76,098	1,495	561	455	34%	187	155	90
Other minority interests						261	77	84
TOTAL						448	232	174

There are no particular contractual restrictions on the assets of BGL BNP Paribas Group related to the presence of the minority shareholder.

- **Internal restructuring that led to a change in minority shareholders' interest in the equity of subsidiaries**

No significant internal restructuring operation occurred during the year ended 31 December 2018, nor during the year ended 31 December 2017.

- **Acquisitions of additional interests and partial sales of interests leading to changes in minority interests in the equity of subsidiaries**

In millions of euros	Year to 31 Dec. 2018		Year to 31 Dec. 2017	
	Attributable to shareholders	Minority interests	Attributable to shareholders	Minority interests
Bank BGZ BNP Paribas				
Dillutive capital increase, reducing the Group's share to 88.75%	(3)	102		
Cardif Lux Vie				
Additional acquisition of 33.3% of the shares of Cardif Lux Vie	(55)	(97)		
Cardif Life Insurance Japan				
Sale of 25% of the shares of Cardif Life Insurance Japan in the framework of entities restructuring in Japan	17	76		
Austin Finance				
Accretive capital decrease, bringing the Group's share to 100%		(82)		
First Hawaiian Inc (note 8.c)				
On 8 May 2018, third offer on First Hawaiian Inc. for 12.1% of its capital, at a 28.35-dollar price per share, and a capital decrease of 1.1%.	85	315		
On 6 February 2017, second offer on First Hawaiian Inc. for 20.6% of its capital at a 32-dollar price per share.			250	588
Cardif IARD				
Dilutive capital increase, which reduced the Group's interest to 66%	30	20		
Dillutive capital increase, reducing the Group interest percentage to 83.26%.			27	5
Financière des Paiements Electroniques				
Additional acquisition, increasing the Group interest percentage to 95 %.			(10)	3
Commerz Finanz GmbH				
Sale of 50.1% of the banking activity to Commerz Bank and simultaneous acquisition of 49.9 % of the credit activity.			(18)	(488)
Other	(3)	(8)	4	7
Total	**71**	**326**	**253**	**115**

- **Commitments to repurchase minority shareholders' interests**

In connection with the acquisition of certain entities, the Group granted minority shareholders put options on their holdings.
The total value of these commitments, which are recorded as a reduction in shareholders' equity, amounts to EUR 540 million at 31 décembre 2018, compared with EUR 522 million at 1er janvier 2018.

8.e SIGNIFICANT RESTRICTIONS IN SUBSIDIARIES, JOINT VENTURES AND ASSOCIATES

Significant restrictions related to the ability of entities to transfer cash to the Group
The ability of entities to pay dividends or to repay loans and advances depends, *inter alia*, on local regulatory requirements for capitalisation and legal reserves, as well as the entities' financial and operating performance. During 2017 and 2018, no BNP Paribas Group entity was subject to significant restrictions other than those related to regulatory requirements.

Significant restrictions relative to the Group's ability to use the assets lodged in consolidated structured entities
Access to the assets of consolidated structured entities in which third-party investors have invested is limited inasmuch as these entities' assets are reserved for the holders of units or securities. These assets total EUR 31 billion as at 31 December 2018 (EUR 24 billion as at 1 January 2018).

Significant restrictions related to the Group's ability to use assets pledged as collateral or under repurchase agreements
The financial instruments pledged by the BNP Paribas Group as collateral or under repurchase agreements are presented in notes 5.r and 6.d.

Significant restrictions related to liquidity reserves
Significant restrictions related to liquidity reserves correspond to the mandatory deposits placed with central banks presented in chapter 5 of the registration document under “Liquidity risk”.

Assets representative of unit-linked insurance contracts
Financial assets representative of unit-linked insurance contracts designated as at fair value through profit or loss, which amount to EUR 62 billion as at 31 December 2018 (compared with EUR 60 billion as at 1 January 2018), are held for the benefit of the holders of these contracts.

8.f STRUCTURED ENTITIES

The BNP Paribas Group is engaged in transactions with sponsored structured entities mainly through its activities of securitisation of financial assets - as either originator or sponsor -, fund management and specialised asset financing.

In addition, the BNP Paribas Group is also engaged in transactions with structured entities that it has not sponsored, notably in the form of investments in funds or securitisation vehicles.

The method for assessing control for structured entities is detailed in Note 1.b.2. “Consolidation methods”.

- **Consolidated structured entities**

The main categories of consolidated structured entities are:

ABCP (Asset-Backed Commercial Paper) conduits: the ABCP securitisation conduits Starbird, Matchpoint and Scaldis fund securitisation transactions managed by the BNP Paribas Group on behalf of its customers. Details on how these are financed and the Group's risk exposure are presented in Chapter 5 of the Registration Document under "Securitisation as sponsor on behalf of clients / Short-term refinancing".

Proprietary securitisation: proprietary securitisation positions originated and held by the BNP Paribas Group are detailed in Chapter 5 of the Registration Document under "Proprietary securitisation activities (originator)".

Funds managed by the Group: the BNP Paribas Group structures different types of funds for which it may act as fund manager, investor, custodian or guarantor. These funds are consolidated when the Group is both the manager and a significant investor, and is therefore exposed to variable returns.

- **Unconsolidated structured entities**

The BNP Paribas Group has entered into relations with unconsolidated structured entities in the course of its business activities to meet the needs of its customers.

Information relative to interests in sponsored structured entities

The main categories of unconsolidated sponsored structured entities are as follows:

Securitisation: the BNP Paribas Group structures securitisation vehicles for the purposes of offering customers financing solutions for their assets, either directly or through consolidated ABCP conduits. Each vehicle finances the purchase of customers' assets (receivables, bonds, etc.) primarily by issuing bonds backed by these assets and whose redemption is linked to their performance.

Funds: the Group structures and manages funds to offer investment opportunities to its customers. Dedicated or public funds are offered to institutional and individual customers, and are distributed and commercially monitored by the BNP Paribas Group. The entities of the BNP Paribas Group responsible for managing these funds may receive management fees and performance commission. The BNP Paribas Group may hold units in these funds, as well as units in funds dedicated to the insurance activity not managed by the BNP Paribas Group.

Asset financing: the BNP Paribas Group establishes and finances structured entities that acquire assets (aircraft, ships, etc.) intended for lease, and the lease payments received by the structured entity are used to repay the financing, which is guaranteed by the asset held by the structured entity. The scope of entities included in this category was refined in 2018.

Other: on behalf of its customers, the Group may also structure entities which invest in assets or are involved in debt restructuring.

An interest in an unconsolidated structured entity is a contractual or non-contractual link that exposes the BNP Paribas Group to variable returns from the performance of the entity.

The Group's assets and liabilities related to the interests held in sponsored structured entities are as follows:

In millions of euros, at 31 December 2018	Securitisation	Funds	Asset Financing	Others	Total
INTERESTS ON THE GROUP BALANCE SHEET					
ASSETS					
Financial instruments at fair value through profit or loss	213	806	8	1,015	2,042
Derivatives used for hedging purposes	212	490	163	90	955
Financial instruments at fair value through equity	149	24			173
Financial assets at amortised cost	14,129	224	811	65	15,229
Other assets		142	1		143
Financial investments of insurance activities		21,978		399	22,377
TOTAL ASSETS	**14,703**	**23,664**	**983**	**1,569**	**40,919**
LIABILITIES					
Financial instruments at fair value through profit or loss	53	803		1,544	2,400
Derivatives used for hedging purposes					
Financial liabilities at amortised cost	738	14,113	128	1,079	16,058
Other liabilities		186	85	1	272
TOTAL LIABILITIES	**791**	**15,102**	**213**	**2,624**	**18,730**
MAXIMUM EXPOSURE TO LOSS	**19,641**	**23,853**	**1,559**	**2,005**	**47,058**
SIZE OF STRUCTURED ENTITIES (1)	**99,642**	**253,140**	**3,544**	**13,419**	**369,745**

In millions of euros, at 1 January 2018	Securitisation	Funds	Asset Financing	Others	Total
INTERESTS ON THE GROUP BALANCE SHEET					
ASSETS					
Financial instruments at fair value through profit or loss	219	968	11	1,134	2,332
Derivatives used for hedging purposes	201	407	154	40	802
Financial instruments at fair value through equity	24	76	38	92	230
Financial assets at amortised cost	9,929	372	931	76	11,308
Other assets		261	1	22	284
Financial investments of insurance activities		27,948		462	28,410
TOTAL ASSETS	**10,373**	**30,032**	**1,135**	**1,826**	**43,366**
LIABILITIES					
Financial instruments at fair value through profit or loss	34	609		2,287	2,930
Derivatives used for hedging purposes				17	17
Financial liabilities at amortised cost	1,058	16,050	137	1,375	18,620
Other liabilities	2	269	79	33	383
TOTAL LIABILITIES	**1,094**	**16,928**	**216**	**3,712**	**21,950**
MAXIMUM EXPOSURE TO LOSS	**14,784**	**30,570**	**1,872**	**2,392**	**49,618**
SIZE OF STRUCTURED ENTITIES (1)	**99,956**	**251,589**	**3,889**	**11,198**	**366,632**

(1) the size of sponsored structured entities equals the total assets of the structured entity for securitisation vehicles, the net asset value for funds (excluding management mandates) and the structured entity's total assets or the amount of the BNP Paribas Group's commitment for asset financing and other structures.

The BNP Paribas Group's maximum exposure to losses on sponsored structured entities is the carrying amount of the assets, excluding, for financial assets at fair value through equity, changes in value taken directly to equity, as well as the nominal amount of the financing commitments and guarantee commitments given and the notional amount of credit default swaps (CDS) sold.

Information relative to interests in non-sponsored structured entities

The main interests held by the BNP Paribas Group when it acts solely as an investor in non-sponsored structured entities are detailed below:

– *Units in funds that are not managed by the Group, which are held by the Insurance business line:* as part of the asset allocation strategy corresponding to investments related to the premiums for unit-linked contracts or for the general fund, the Insurance business line subscribes to units of structured entities. These short- or medium-term investments are held for their financial performance and meet the risk diversification criteria inherent to the business. They amounted to EUR 30 billion as at 31 December 2018 (EUR 31 billion as at 1 January 2018). Changes in value and the majority of the risks associated with these investments are borne by policyholders in the case of assets representative of unit-linked contracts, and by the insurer in the case of assets representative of the general fund;

– *Other investments in funds not managed by the Group:* as part of its trading business, the BNP Paribas Group invests in structured entities without any involvement in either managing or structuring these entities (investments in mutual funds, securities funds or alternative funds), particularly as economic hedge for structured products sold to customers. The Group also invests in minority holdings in investment funds, in support of companies, as part of its venture capital business. These investments amounted to EUR 8 billion as at 31 December 2018 (unchanged from 1 January 2018).

– *Investments in securitisation vehicles:* the breakdown of the Group's exposure and the nature of the securities held are presented in Chapter 5 of the Registration Document in the section "Securitisation as investor".

Besides, in the framework of its asset financing activity, the BNP Paribas Group provides financing to structured entities that are established by and for its clients and whose purpose is to acquire assets (aircraft, ships, etc.) intended for lease to those same clients. These financings amount to EUR 9 billion as at 31 December 2018 (EUR 11 billion as at 1 January 2018).

8.g COMPENSATION AND BENEFITS AWARDED TO THE GROUP'S CORPORATE OFFICERS

The remuneration and benefits policy relating to the Group's corporate officers, as well as the detailed information on an individual basis, are presented in chapter 2 Corporate Governance of the Registration document.

- **Remuneration and benefits awarded to the Group's corporate officers**

	Year to 31 Dec. 2018	Year to 31 Dec. 2017
Gross remuneration, including Directors' fees and benefits in kind		
- payable for the year	€ 6,060,688	€ 6,236,607
- paid during the year	€ 9,428,032	€ 8,152,686
Post-employment benefits		
Retirement bonuses: present value of the benefit obligation (payroll taxes excluded)	€ 243,028	€ 255,440
Defined contribution pension plan : contributions paid by BNP Paribas during the year	€ 5,124	€ 1,295
Welfare benefits: premiums paid by BNP Paribas during the year	€ 12,571	€ 12,461
Share-based payments		
Stock subscription options		
- value of stock options granted during the year	Nil	Nil
- number of options held at 31 December	28,640	66,840
Performance shares		
- value of shares granted during the year	Nil	Nil
- number of shares held at 31 December	Nil	Nil
Long-term compensation		
- fair value at grant date (*)	€ 463,594	€ 785,765

(*) Valuation according to the method described in note 7.e.

As at 31 December 2018, no corporate officer is eligible to a contingent collective defined-benefit top-up pension plan.

- **Directors' fees paid to members of the board of directors**

The directors' fees paid in 2018 to all members of the Board of Directors amount to EUR 1,300,000, unchanged from 2017. The amount paid in 2018 to members other than corporate officers was EUR 1,176,907, compared with EUR 1,175,312 in 2017.

- **Remuneration and benefits awarded to directors representing the employees**

In euros	Year to 31 December 2018	Year to 31 December 2017
Gross remuneration paid during the year	108,077	85,685
Directors' fees (paid to the trade unions)	152,298	182,371
Premiums paid by BNP Paribas during the year into schemes related to Garantie Vie Professionnelle Accidents benefits and healthcare expense coverage	1,658	1,478
Contributions paid by BNP Paribas during the year into the defined-contribution plan	1,204	729

- **Loans, advances and guarantees granted to the Group's corporate officers**

At 31 December 2018, the total outstanding loans granted directly or indirectly to the Group's corporate officers and their spouses amounted to EUR 7,094,958 (EUR 6,881,664 at 31 December 2017). These loans representing normal transactions were carried out on an arm's length basis.

8.h OTHER RELATED PARTIES

Other related parties of the BNP Paribas Group comprise consolidated companies (including entities consolidated under the equity method) and entities managing post-employment benefit plans offered to Group employees (except for multi-employer and multi-industry schemes).

Transactions between the BNP Paribas Group and related parties are carried out on an arm's length basis.

RELATIONS BETWEEN CONSOLIDATED COMPANIES

A list of companies consolidated by the BNP Paribas Group is provided in note 8.j "Scope of consolidation". Transactions and outstanding balances between fully-consolidated entities are eliminated. The tables below show transactions with entities accounted for under the equity method.

- **Outstanding balances of related-party transactions:**

	31 December 2018 IFRS 9 & IFRS 15		1 January 2018 IFRS 9 & IFRS 15	
In millions of euros	Joint ventures	Associates	Joint ventures	Associates
ASSETS				
On demand accounts	2	171	7	186
Loans	3,784	85	3,675	1,980
Securities	769	-	829	-
Other assets	56	76	2	123
Financial investments of insurance activities	1	3	1	7
Total	**4,612**	**335**	**4,514**	**2,296**
LIABILITIES				
On demand accounts	150	555	74	625
Other borrowings	53	2,084	45	2,303
Other liabilities	43	61	14	37
Technical reserves and other insurance liabilities	-	2	-	4
Total	**246**	**2,702**	**133**	**2,969**
FINANCING COMMITMENTS AND GUARANTEE COMMITMENTS				
Financing commitments given	132	671	164	822
Guarantee commitments given	2,543	44	3,002	111
Total	**2,675**	**715**	**3,166**	**933**

The Group also carries out trading transactions with related parties involving derivatives (swaps, options and forwards, etc.) and financial instruments purchased or underwritten and issued by them (equities, bonds, etc.).

- **Related-party profit and loss items:**

In millions of euros	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15* Joint ventures	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15* Associates	Year to 31 Dec. 2017 *IAS 39* Joint ventures	Year to 31 Dec. 2017 *IAS 39* Associates
Interest income	17	25	14	33
Interest expense	(2)	(10)	(1)	(16)
Commission income	188	271	3	393
Commission expense	(15)	(18)	(1)	(13)
Services provided	1	16	1	17
Services received	-	-	-	(5)
Lease income	1	-	-	1
Net income from insurance activities	(2)	(1)	-	-
Total	**188**	**283**	**16**	**410**

GROUP ENTITIES MANAGING CERTAIN POST-EMPLOYMENT BENEFIT PLANS OFFERED TO GROUP EMPLOYEES

In Belgium, BNP Paribas Fortis funds a number of pension schemes managed by AG Insurance in which the BNP Paribas Group has a 25% equity interest.

In other countries, post-employment benefit plans are generally managed by independent fund managers or independent insurance companies, and occasionally by Group companies (in particular BNP Paribas Asset Management, BNP Paribas Cardif, Bank of the West and First Hawaiian Bank). In Switzerland, a dedicated foundation manages pension plans for BNP Paribas Suisse's employees.

At 31 December 2018, the value of plan assets managed by Group companies or by companies over which the Group exercises significant influence was EUR 3,853 million (EUR 3,916 million as at 1 January 2018). Amounts received by Group companies in the year to 31 December 2018 totalled EUR 4.7 million, and were mainly composed of management and custody fees (EUR 4.5 million in 2017).

8.i FAIR VALUE OF FINANCIAL INSTRUMENTS CARRIED AT AMORTISED COST

The information supplied in this note must be used and interpreted with the greatest caution for the following reasons:

- These fair values are an estimate of the value of the relevant instruments as at 31 December 2018. They are liable to fluctuate from day to day as a result of changes in various parameters, such as interest rates and credit quality of the counterparty. In particular, they may differ significantly from the amounts actually received or paid on maturity of the instrument. In most cases, the fair value is not intended to be realised immediately, and in practice might not be realised immediately. Consequently, this fair value does not reflect the actual value of the instrument to BNP Paribas as a going concern;
- Most of these fair values are not meaningful, and hence are not taken into account in the management of the commercial banking activities which use these instruments;
- Estimating a fair value for financial instruments carried at historical cost often requires the use of modelling techniques, hypotheses and assumptions that may vary from bank to bank. This

means that comparisons between the fair values of financial instruments carried at historical cost as disclosed by different banks may not be meaningful;

- The fair values shown below do not include the fair values of finance lease transactions, non-financial instruments such as property, plant and equipment, goodwill and other intangible assets such as the value attributed to demand deposit portfolios or customer relationships. Consequently, these fair values should not be regarded as the actual contribution of the instruments concerned to the overall valuation of the BNP Paribas Group.

In millions of euros 31 December 2018	Estimated fair value				Carrying value
	Level 1	Level 2	Level 3	Total	
FINANCIAL ASSETS					
Loans and advances to credit institutions and customers[(1)]		82,358	681,583	763,941	753,293
Debt securities at amortised cost *(note 5.e)*	54,348	17,764	2,840	74,952	75,073
FINANCIAL LIABILITIES					
Deposits from credit institutions and customers		876,320		876,320	875,463
Debt securities *(note 5.h)*	49,233	102,511		151,744	151,451
Subordinated debt *(note 5.h)*	10,883	6,494		17,377	17,627

[(1)] Finance leases excluded

In millions of euros, at 1 January 2018	Estimated fair value				Carrying value
	Level 1	Level 2	Level 3	Total	
FINANCIAL ASSETS					
Loans and advances to credit institutions and customers[(1)]		82,054	652,520	734,574	722,365
Debt securities at amortised cost *(note 5.e)*	51,649	16,524	1,903	70,076	69,426
FINANCIAL LIABILITIES					
Deposits from credit institutions and customers		837,843		837,843	837,444
Debt securities *(note 5.h)*	49,530	100,495		150,025	148,156
Subordinated debt *(note 5.h)*	8,891	7,767		16,658	15,951

[(1)] Finance leases excluded

The valuation techniques and assumptions used by BNP Paribas ensure that the fair value of financial assets and liabilities carried at amortised cost is measured on a consistent basis throughout the Group. Fair value is based on prices quoted in an active market when these are available. In other cases, fair value is determined using valuation techniques such as discounting of estimated future cash flows for loans, liabilities and debt securities at amortised cost, or specific valuation models for other financial instruments as described in note 1, “Summary of significant accounting policies applied by the BNP Paribas Group”. The description of the fair value hierarchy levels is also presented in the accounting principles (note 1.e.10). In the case of loans, liabilities and debt securities at amortised cost that have an initial maturity of less than one year (including demand deposits) or of most regulated savings products, fair value equates to carrying amount. These instruments have been classified in Level 2, except for loans to customers, which are classified in Level 3.

8.j SCOPE OF CONSOLIDATION

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNP Paribas SA	France								
BNPP SA (Argentina branch)	Argentina	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Australia branch)	Australia	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Austria branch)	Austria	Full	100,0%	100,0%		Full	100,0%	100,0%	E2
BNPP SA (Bahrain branch)	Bahrain	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Belgium branch)	Belgium	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Bulgaria branch)	Bulgaria	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Canada branch)	Canada	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Cayman Islands branch)	Cayman Islands	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Czech Republic branch)	Czech Rep.	Full	100,0%	100,0%		Full	100,0%	100,0%	E2
BNPP SA (Denmark branch)	Denmark	Full	100,0%	100,0%		Full	100,0%	100,0%	E2
BNPP SA (Finland branch)	Finland	Full	100,0%	100,0%		Full	100,0%	100,0%	E2
BNPP SA (Germany branch)	Germany	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Hong Kong branch)	Hong Kong	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Hungary branch)	Hungary	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (India branch)	India	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Ireland branch)	Ireland	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Italy branch)	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Japan branch)	Japan	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Jersey branch)	Jersey	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Kuwait branch)	Kuwait	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Luxembourg branch)	Luxembourg	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Malaysia branch)	Malaysia	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Monaco branch)	Monaco	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Netherlands branch)	Netherlands	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Norway branch)	Norway	Full	100,0%	100,0%		Full	100,0%	100,0%	E2
BNPP SA (Panama branch)	Panama	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Philippines branch)	Philippines	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Poland branch)	Poland	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Portugal branch)	Portugal	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Qatar branch)	Qatar	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Republic of Korea branch)	Rep. of Korea	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Romania branch)	Romania	Full	100,0%	100,0%		Full	100,0%	100,0%	E2
BNPP SA (Saudi Arabia branch)	Saudi Arabia	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Singapore branch)	Singapore	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (South Africa branch)	South Africa	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Spain branch)	Spain	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Sweden branch)	Sweden	Full	100,0%	100,0%		Full	100,0%	100,0%	E2
BNPP SA (Taiwan branch)	Taiwan	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Thailand branch)	Thailand	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (United Arab Emirates branch)	United Arab Emirates	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (United Kingdom branch)	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (United States branch)	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP SA (Viet Nam branch)	Viet Nam	Full	100,0%	100,0%		Full	100,0%	100,0%	
Retail Banking & Services									
Domestic Markets									
Retail Banking - France									
B*Capital	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
Banque de Wallis et Futuna	France	Full (1)	51,0%	51,0%		Full (1)	51,0%	51,0%	
BNPP Antilles Guyane	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Développement	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Développement Oblig	France	Full	100,0%	100,0%	E2				
BNPP Factor	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Factor (Spain branch)	Spain	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Factor Sociedade Financeira de Credito SA	Portugal	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Nouvelle Calédonie	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Réunion	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
Compagnie pour le Financement des Loisirs	France	Equity	46,0%	46,0%	V4	Equity	46,0%	45,8%	E1
Copartis	France	Equity (3)	50,0%	50,0%		Equity	50,0%	50,0%	E1
Euro Securities Partners	France	Equity (3)	50,0%	50,0%	E1				
Partecis	France	Equity (3)	50,0%	50,0%	E1				
Portzamparc Société de Bourse	France	Full (1)	94,9%	94,9%	V1	Full (1)	75,5%	75,5%	V1
Protection 24	France	Full	100,0%	100,0%	E1				
Société Lairoise de Participations	France	Full	100,0%	100,0%	E1				
Retail Banking - Belgium									
Alpha Card SCRL	Belgium								S2
Bancontact Payconiq	Belgium	Equity	22,5%	22,5%	E1				
Banking Funding Company SA	Belgium	Equity	33,5%	33,5%		Equity	33,5%	33,5%	E1
Belgian Mobile ID	Belgium	Equity	15,0%	15,0%	E3				
BNPP Commercial Finance Ltd	UK	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP Factor AB	Sweden	Full	100,0%	99,9%	E1				
BNPP Factor AS	Denmark	Full	100,0%	99,9%		Full	100,0%	99,9%	D1
BNPP Factor Deutschland BV	Netherlands				S4	Full	100,0%	99,9%	
BNPP Factor GmbH	Germany	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP Factor NV	Netherlands	Full	100,0%	99,9%		Full	100,0%	99,9%	E1
BNPP Factoring Support (Ex- BNPP Factoring Coverage Europe Holding NV)	Netherlands	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP Fortis	Belgium	Full	99,9%	99,9%		Full	99,9%	99,9%	
BNPP Fortis (Austria branch)	Austria								S1
BNPP Fortis (Czech Republic branch)	Czech Rep.				S1	Full	100,0%	99,9%	
BNPP Fortis (Denmark branch)	Denmark				S1	Full	100,0%	99,9%	
BNPP Fortis (Finland branch)	Finland								S1
BNPP Fortis (Netherlands branch)	Netherlands								S1
BNPP Fortis (Norway branch)	Norway								S1
BNPP Fortis (Romania branch)	Romania	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP Fortis (Spain branch)	Spain	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP Fortis (Sweden branch)	Sweden								S1
BNPP Fortis (United States branch)	USA	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP Fortis Factor NV	Belgium	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP Fortis Film Finance	Belgium	Full	99,0%	98,9%	E1				
BNPP Fortis Funding SA	Luxembourg	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP FPE Belgium	Belgium	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP FPE Expansion	Belgium	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP FPE Management	Belgium	Full	100,0%	99,9%		Full	100,0%	99,9%	D1
Bpost Banque	Belgium	Equity (3)	50,0%	50,0%		Equity (3)	50,0%	50,0%	
Credissimo	Belgium	Full	100,0%	99,9%		Full	100,0%	99,9%	E1
Credissimo Hainaut SA	Belgium	Full	99,7%	99,7%		Full	99,7%	99,7%	E1
Crédit pour Habitations Sociales	Belgium	Full	81,7%	81,6%		Full	81,7%	81,6%	E1
Demetris NV	Belgium				S3	Equity *	100,0%	99,9%	
Favor Finance	Belgium				S3	Full	51,0%	51,0%	E1
Gemma Frisius Fonds KU Leuven	Belgium	FV	40,0%	40,0%	E1				
Het Anker NV	Belgium	FV	27,8%	27,8%	E1				
Holding PCS	Belgium	FV	31,7%	31,7%	E1				
Immo Beaulieu	Belgium	Equity	25,0%	25,0%	E1				
Immobilière Sauveniere SA	Belgium	Full	100,0%	99,9%	D1	Equity *	100,0%	99,9%	
Isabel SA NV	Belgium	Equity	25,3%	25,3%	E1				
Microstart	Belgium	Full	85,5%	66,2%	E1				
Novy Invest	Belgium	FV	33,7%	33,7%	D1	Equity	33,7%	33,7%	E1
Omega Invest	Belgium	FV	28,4%	28,3%	E1				
Penne International	Belgium	FV	74,9%	74,9%	D1	Equity *	74,9%	74,9%	E1
Sowo Invest SA NV	Belgium	Full	87,5%	87,5%	E1				
Studio 100	Belgium	FV	32,5%	32,5%	D1	Equity	32,5%	32,5%	E1
Structured Entities									
BASS Master Issuer NV	Belgium	Full	-	-		Full	-	-	
Esmee Master Issuer	Belgium	Full	-	-		Full	-	-	
Epimede	Belgium	Equity	-	-	E1				
Retail Banking - Luxembourg									
BGL BNPP	Luxembourg	Full	66,0%	65,9%		Full	66,0%	65,9%	
BGL BNPP (Germany branch)	Germany	Full	100,0%	65,9%		Full	100,0%	65,9%	
BNPP Lease Group Luxembourg SA	Luxembourg	Full	100,0%	65,9%		Full	100,0%	65,9%	
Cofhylux SA	Luxembourg	Full	100,0%	65,9%		Full	100,0%	65,9%	
Visalux	Luxembourg	Equity	24,8%	15,7%	E1				
Structured Entities									
Elimmo	Luxembourg	Full	-	-	E1				
Retail Banking - Italy (BNL Banca Commerciale)									
Artigiancassa SPA	Italy	Full	73,9%	73,9%		Full	73,9%	73,9%	
Axepta SPA (Ex- BNL Positivity SRL)	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
Banca Nazionale Del Lavoro SPA	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNL Finance SPA	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
Business Partner Italia SCPA	Italy	Full	100,0%	100,0%	V4	Full	99,9%	99,8%	
International Factors Italia SPA	Italy	Full	99,7%	99,7%		Full	99,7%	99,7%	
Permicro SPA	Italy	Equity	20,9%	20,9%	E1				
Serfactoring SPA	Italy	Equity	27,0%	26,9%	E1				
Servizio Italia SPA	Italy	Full	100,0%	100,0%	D1	Equity *	100,0%	100,0%	
Sviluppo HQ Tiburtina SRL	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
Structured Entities									
EMF IT 2008 1 SRL	Italy	Full	-	-		Full	-	-	
Tierre Securitisation SRL	Italy	Full	-	-		Full	-	-	
Vela ABS SRL	Italy	Full	-	-		Full	-	-	
Vela Consumer 2 SRL	Italy	Full	-	-		Full	-	-	E2
Vela Consumer SRL	Italy	Full	-	-		Full	-	-	
Vela Home SRL	Italy	Full	-	-		Full	-	-	
Vela Mortgages SRL	Italy	Full	-	-		Full	-	-	
Vela OBG SRL	Italy	Full	-	-		Full	-	-	
Vela RMBS SRL	Italy	Full	-	-		Full	-	-	
Arval									
Annuo Jiutong (Ex- Arval Jiutong Co Ltd)	China				V2/S2	Equity	40,0%	40,0%	
Artel	France	Full	100,0%	99,9%	D1	Equity *	100,0%	99,9%	
Arval AB	Sweden	Full	100,0%	99,9%	D1	Equity *	100,0%	99,9%	
Arval AS	Denmark	Full	100,0%	99,9%		Full	100,0%	99,9%	D1
Arval Austria GmbH	Austria	Full	100,0%	99,9%		Full	100,0%	99,9%	D1
Arval Belgium NV SA	Belgium	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval Benelux BV	Netherlands	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval Brasil Ltda	Brazil	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval BV	Netherlands	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval CZ SRO	Czech Rep.	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval Deutschland GmbH	Germany	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval Fleet Services	France	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval Fleet Services BV	Netherlands								S4
Arval Hellas Car Rental SA	Greece	Full	100,0%	99,9%	D1	Equity *	100,0%	99,9%	
Arval India Private Ltd	India	Full	100,0%	99,9%	D1	Equity *	100,0%	99,9%	
Arval Italy Fleet Services SRL	Italy								S4
Arval LLC	Russia	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval Luxembourg SA	Luxembourg	Full	100,0%	99,9%		Full	100,0%	99,9%	D1
Arval Magyarorszag KFT	Hungary	Full	100,0%	99,9%	D1	Equity *	100,0%	99,9%	
Arval Maroc SA	Morocco	Full	100,0%	89,0%	D1	Equity *	100,0%	89,0%	
Arval OY	Finland	Full	100,0%	99,9%		Full	100,0%	99,9%	D1
Arval Relsa SPA	Chile	Equity (3)	50,0%	50,0%	E1				
Arval Schweiz AG	Switzerland	Full	100,0%	99,9%		Full	100,0%	99,9%	D1
Arval Service Lease	France	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval Service Lease Aluger Operational Automoveis SA	Portugal	Full	100,0%	99,9%	D1	Equity *	100,0%	99,9%	
Arval Service Lease Italia SPA	Italy	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval Service Lease Polska SP ZOO	Poland	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval Service Lease Romania SRL	Romania	Full	100,0%	99,9%	D1	Equity *	100,0%	99,9%	
Arval Service Lease SA	Spain	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval Slovakia SRO	Slovakia	Full	100,0%	99,9%		Full	100,0%	99,9%	D1
Arval Trading	France	Full	100,0%	99,9%		Full	100,0%	99,9%	D1
Arval UK Group Ltd	UK	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval UK Leasing Services Ltd	UK	Full	100,0%	99,9%		Full	100,0%	99,9%	
Arval UK Ltd	UK	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP Fleet Holdings Ltd	UK	Full	100,0%	99,9%		Full	100,0%	99,9%	
Cetelem Renting	France	Full	100,0%	99,9%	E1				
Cofiparc	France	Full	100,0%	99,9%		Full	100,0%	99,9%	
Greenval Insurance DAC	Ireland	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Locadif	Belgium	Full	100,0%	99,9%		Full	100,0%	99,9%	
Louveo	France	Full	100,0%	99,9%	E1				
Public Location Longue Durée	France	Full	100,0%	99,9%		Full	100,0%	99,9%	D1
TEB Arval Arac Filo Kiralama AS	Turkey	Full	100,0%	75,0%		Full	100,0%	75,0%	
Leasing Solutions									
Albury Asset Rentals Ltd	UK				S1	Full	100,0%	83,0%	
All In One Vermietung GmbH	Austria	Full	100,0%	83,0%	E1				
All In One Vermietungsgesellschaft für Telekommunicationsanlagen mbH	Germany								S3
Aprolis Finance	France	Full	51,0%	42,3%		Full	51,0%	42,3%	
Arius	France	Full	100,0%	83,0%		Full	100,0%	83,0%	
Artegy	France	Full	100,0%	83,0%		Full	100,0%	83,0%	
BNPP Finansal Kiralama AS	Turkey	Full	100,0%	82,5%		Full	100,0%	82,5%	
BNPP Lease Group	France	Full (1)	100,0%	83,0%		Full (1)	100,0%	83,0%	
BNPP Lease Group (Germany branch)	Germany	Full (1)	100,0%	83,0%		Full (1)	100,0%	83,0%	
BNPP Lease Group (Italy branch)	Italy	Full (1)	100,0%	83,0%		Full (1)	100,0%	83,0%	
BNPP Lease Group (Portugal branch)	Portugal	Full (1)	100,0%	83,0%		Full (1)	100,0%	83,0%	
BNPP Lease Group (Spain branch)	Spain	Full (1)	100,0%	83,0%		Full (1)	100,0%	83,0%	
BNPP Lease Group Belgium	Belgium	Full	100,0%	83,0%		Full	100,0%	83,0%	
BNPP Lease Group GmbH & Co KG	Austria	Full	100,0%	83,0%	E1				
BNPP Lease Group KFT	Hungary								S3
BNPP Lease Group Leasing Solutions SPA	Italy	Full	100,0%	95,5%		Full	100,0%	95,5%	

Name	Country	31 December 2018				31 December 2017			
		Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNPP Lease Group Lizing RT	Hungary								S3
BNPP Lease Group PLC	UK	Full	100,0%	83,0%		Full	100,0%	83,0%	
BNPP Lease Group Rentals Ltd	UK	Full	100,0%	83,0%		Full	100,0%	83,0%	
BNPP Lease Group SP ZOO	Poland	Full	100,0%	83,0%		Full	100,0%	83,0%	D1
BNPP Leasing Services	Poland	Full	100,0%	88,7%	V4	Full	100,0%	88,3%	E1
BNPP Leasing Solution AS	Norway	Full	100,0%	83,0%	E3				
BNPP Leasing Solutions	Luxembourg	Full	100,0%	83,0%		Full	100,0%	83,0%	
BNPP Leasing Solutions IFN SA	Romania	Full	100,0%	83,0%		Full	100,0%	83,0%	D1
BNPP Leasing Solutions Ltd	UK	Full	100,0%	83,0%		Full	100,0%	83,0%	
BNPP Leasing Solutions NV	Netherlands	Full	100,0%	83,0%		Full	100,0%	83,0%	
BNPP Leasing Solutions Suisse SA	Switzerland	Full	100,0%	83,0%	D1	Equity *	100,0%	83,0%	
BNPP Rental Solutions Ltd	UK	Full	100,0%	83,0%		Full	100,0%	83,0%	D1
BNPP Rental Solutions SPA	Italy	Full	100,0%	83,0%	D1	Equity *	100,0%	83,0%	
Claas Financial Services	France	Full (1)	51,0%	42,3%		Full (1)	51,0%	42,3%	V2
Claas Financial Services (Germany branch)	Germany	Full (1)	100,0%	42,3%		Full (1)	100,0%	42,3%	V3
Claas Financial Services (Italy branch)	Italy	Full (1)	100,0%	42,3%		Full (1)	100,0%	42,3%	V3
Claas Financial Services (Poland branch)	Poland	Full (1)	100,0%	42,3%		Full (1)	100,0%	42,3%	V3
Claas Financial Services (Spain branch)	Spain	Full (1)	100,0%	42,3%		Full (1)	100,0%	42,3%	V3
Claas Financial Services Ltd	UK	Full	51,0%	42,3%		Full	51,0%	42,3%	
CMV Mediforce	France	Full (1)	100,0%	83,0%	V3	Full (1)	100,0%	100,0%	
CNH Industrial Capital Europe	France	Full (1)	50,1%	41,6%		Full (1)	50,1%	41,6%	
CNH Industrial Capital Europe (Belgium branch)	Belgium	Full (1)	100,0%	41,6%		Full (1)	100,0%	41,6%	
CNH Industrial Capital Europe (Germany branch)	Germany	Full (1)	100,0%	41,6%		Full (1)	100,0%	41,6%	
CNH Industrial Capital Europe (Italy branch)	Italy	Full (1)	100,0%	41,6%		Full (1)	100,0%	41,6%	
CNH Industrial Capital Europe (Poland branch)	Poland	Full (1)	100,0%	41,6%		Full (1)	100,0%	41,6%	
CNH Industrial Capital Europe (Spain branch)	Spain	Full (1)	100,0%	41,6%		Full (1)	100,0%	41,6%	
CNH Industrial Capital Europe BV	Netherlands	Full	100,0%	41,6%		Full	100,0%	41,6%	
CNH Industrial Capital Europe GmbH	Austria	Full	100,0%	41,6%		Full	100,0%	41,6%	
CNH Industrial Capital Europe Ltd	UK	Full	100,0%	41,6%		Full	100,0%	41,6%	
Commercial Vehicle Finance Ltd	UK	Full	100,0%	83,0%		Full	100,0%	83,0%	
ES-Finance	Belgium	Full	100,0%	99,9%		Full	100,0%	99,9%	
Fortis Lease	France	Full (1)	100,0%	83,0%		Full (1)	100,0%	83,0%	
Fortis Lease Belgium	Belgium	Full	100,0%	83,0%		Full	100,0%	83,0%	
Fortis Lease Deutschland GmbH	Germany	Full	100,0%	83,0%		Full	100,0%	83,0%	D1
Fortis Lease Iberia SA	Spain	Full	100,0%	86,6%		Full	100,0%	86,6%	D1
Fortis Lease Portugal	Portugal	Full	100,0%	83,0%		Full	100,0%	83,0%	D1
Fortis Lease UK Ltd	UK	Full	100,0%	83,0%	D1	Equity *	100,0%	83,0%	
Fortis Vastgoedlease BV	Netherlands	Full	100,0%	83,0%	D1	Equity *	100,0%	83,0%	
Heffiq Heftruck Verhuur BV	Netherlands	Full	50,1%	41,5%	E1				
Humberclyde Commercial Investments Ltd	UK				S1	Full	100,0%	83,0%	
JCB Finance	France	Full (1)	100,0%	41,6%		Full (1)	100,0%	41,6%	
JCB Finance (Germany branch)	Germany	Full (1)	100,0%	41,6%		Full (1)	100,0%	41,6%	
JCB Finance (Italy branch)	Italy	Full (1)	100,0%	41,6%		Full (1)	100,0%	41,6%	
JCB Finance Holdings Ltd	UK	Full	50,1%	41,6%		Full	50,1%	41,6%	
Manitou Finance Ltd	UK	Full	51,0%	42,3%		Full	51,0%	42,3%	
MFF	France	Full (1)	51,0%	42,3%		Full (1)	51,0%	42,3%	
Natio Energie 2	France	Full	100,0%	100,0%	E1				
Natiocredibail	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
RD Leasing IFN SA	Romania	Full	100,0%	83,0%	E3				
RD Portofoliu SRL	Romania								S3
Same Deutz Fahr Finance	France	Full (1)	100,0%	83,0%		Full (1)	100,0%	83,0%	
Same Deutz Fahr Finance Ltd	UK				S1	Full	100,0%	83,0%	
SNC Natiocredimurs	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
UCB Bail 2	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Structured Entities									
BNPP B Institutional II Short Term	Belgium								S3
BNPP B Institutional II Treasury 17	Belgium				S3	Full	-	-	E1
FL Zeebrugge	Belgium	Full	-	-	D1	Equity *	-	-	E1
Folea Grundstucksverwaltungs und Vermietungs Gmbh & Co	Germany	Full	-	-	D1	Equity *	-	-	E1
New Digital Businesses									
Financière des Paiements Electroniques	France	Full	95,0%	95,0%		Full	95,0%	95,0%	E3
Lyf SA	France	Equity (3)	46,0%	46,0%	V1	Equity (3)	43,5%	43,5%	E3
Lyf SAS	France	Equity (3)	45,8%	45,8%	V1	Equity (3)	43,3%	43,3%	E3
Personal Investors									
Geojit Technologies Private Ltd	India	Equity	35,0%	35,0%		Equity	35,0%	35,0%	
Hellobank BNPP Austria AG	Austria								S4
Human Value Developers Private Ltd	India	Full	100,0%	100,0%		Full	100,0%	100,0%	
Sharekhan BNPP Financial Services Private Ltd	India	Full	100,0%	100,0%		Full	100,0%	100,0%	D1
Sharekhan Commodities Private Ltd	India	Full	100,0%	100,0%	E1				
Sharekhan Ltd	India	Full	100,0%	100,0%		Full	100,0%	100,0%	
International Financial Services									
BNP Paribas Personal Finance									
Alpha Crédit SA	Belgium	Full	100,0%	99,9%		Full	100,0%	99,9%	
Autop Ocean Indien	France	Full	100,0%	97,8%	E1				
Axa Banque Financement	France	Equity	35,0%	35,0%		Equity	35,0%	35,0%	
Banco BNPP Personal Finance SA	Portugal	Full	100,0%	100,0%		Full	100,0%	100,0%	
Banco Cetelem Argentina SA	Argentina	Full	100,0%	100,0%		Full	100,0%	100,0%	
Banco Cetelem SA	Brazil	Full	100,0%	100,0%		Full	100,0%	100,0%	
Banco Cetelem SAU	Spain	Full	100,0%	100,0%		Full	100,0%	100,0%	
Banco de Servicios Financieros SA	Argentina	Equity	40,0%	40,0%		Equity	40,0%	40,0%	
Banque Solfea	France	Equity (3)	45,0%	45,0%		Equity (3)	45,0%	45,0%	
BGN Mercantil E Servicos Ltda	Brazil	Full	100,0%	100,0%		Full	100,0%	100,0%	D1
BNPP Personal Finance	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Personal Finance (Austria branch)	Austria	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Personal Finance (Bulgaria branch)	Bulgaria	Full	100,0%	100,0%	E2				
BNPP Personal Finance (Czech Republic branch)	Czech Rep.	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Personal Finance (Romania branch)	Romania	Full	100,0%	100,0%	E2				
BNPP Personal Finance (Slovakia branch)	Slovakia	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Personal Finance BV	Netherlands	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Personal Finance EAD	Bulgaria				S4	Full	100,0%	100,0%	
BNPP Personal Finance South Africa Ltd	South Africa	Full	100,0%	100,0%		Full	100,0%	100,0%	
Cafineo	France	Full (1)	51,0%	50,8%		Full (1)	51,0%	50,8%	
Carrefour Banque	France	Equity	40,0%	40,0%		Equity	40,0%	40,0%	
Cetelem Algérie	Algeria	Full	100,0%	100,0%	E1				
Cetelem America Ltda	Brazil	Full	100,0%	100,0%		Full	100,0%	100,0%	
Cetelem Bank LLC	Russia	Equity	20,8%	20,8%		Equity	20,8%	20,8%	
Cetelem Gestion AIE	Spain	Full	100,0%	96,5%	E1				
Cetelem IFN	Romania				S4	Full	100,0%	100,0%	
Cetelem SA de CV (Ex- BNPP Personal Finance SA de CV)	Mexico	Full	100,0%	100,0%		Full	100,0%	100,0%	
Cetelem Servicios Informaticos AIE	Spain	Full	100,0%	81,5%	E1				
Cetelem Servicos Ltda	Brazil	Full	100,0%	100,0%	D1	Equity *	100,0%	100,0%	
Cofica Bail	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	

Name	Country	31 December 2018				31 December 2017			
		Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
Cofiplan	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
Commerz Finanz	Germany								S4
Creation Consumer Finance Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
Creation Financial Services Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
Crédit Moderne Antilles Guyane	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
Crédit Moderne Océan Indien	France	Full (1)	97,8%	97,8%		Full (1)	97,8%	97,8%	
Direct Services EAD	Bulgaria								S4
Domofinance	France	Full (1)	55,0%	55,0%		Full (1)	55,0%	55,0%	
Effico	France	Equity	24,5%	24,5%		Equity	24,5%	24,5%	V2
Ekspres Bank AS	Denmark	Full	100,0%	100,0%		Full	100,0%	100,0%	
Ekspres Bank AS (Norway branch)	Norway	Full	100,0%	100,0%		Full	100,0%	100,0%	
Ekspres Bank AS (Sweden branch)	Sweden	Full	100,0%	100,0%	E2				
Eos Aremas Belgium SA NV	Belgium	Equity	50,0%	49,9%		Equity	50,0%	49,9%	
Fidecom	France								S4
Findomestic Banca SPA	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
Findomestic Banka AD	Serbia								S2
GCC Consumo Establecimiento Financiero de Credito SA	Spain	Full	51,0%	51,0%		Full	51,0%	51,0%	D1
Genius Auto Finance Co Ltd	China	Equity (3)	20,0%	20,0%		Equity (3)	20,0%	20,0%	E1
Gesellschaft für Capital & Vermögensverwaltung GmbH	Germany				S3	Equity *	100,0%	99,9%	
Inkasso Kodat GmbH & Co KG	Germany				S3	Equity *	100,0%	99,9%	
International Development Resources AS Services SA	Spain				S3	Equity *	100,0%	100,0%	
Laser ABS 2017 Holding Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	E1
Leval 20	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Loisirs Finance	France	Full (1)	51,0%	51,0%		Full (1)	51,0%	51,0%	
Magyar Cetelem Bank ZRT	Hungary	Full	100,0%	100,0%		Full	100,0%	100,0%	
Neuilly Contentieux	France	Full	96,0%	95,7%	E1				
Norrsken Finance	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
Olympia SAS	France	Full	50,0%	50,0%		Full	50,0%	50,0%	E2
Oney Magyarorszag ZRT	Hungary	Equity	40,0%	40,0%		Equity	40,0%	40,0%	
Opel Bank	France	Full	50,0%	50,0%		Full	50,0%	50,0%	E3
Opel Bank GmbH	Germany	Full	100,0%	50,0%		Full	100,0%	50,0%	E3
Opel Bank GmbH (Greece branch)	Greece	Full	100,0%	50,0%		Full	100,0%	50,0%	E3
Opel Bank GmbH (Ireland branch)	Ireland	Full	100,0%	50,0%		Full	100,0%	50,0%	E3
Opel Bank GmbH (Spain branch)	Spain	Full	100,0%	50,0%	E2				
Opel Finance AB	Sweden	Full	100,0%	50,0%	D1	Equity *	100,0%	50,0%	E3
Opel Finance BVBA	Belgium	Full	100,0%	50,0%	D1	Equity *	100,0%	50,0%	E3
Opel Finance Germany Holdings GmbH	Germany				S4	Full	100,0%	50,0%	E3
Opel Finance International BV	Netherlands	Full	100,0%	50,0%		Full	100,0%	50,0%	E3
Opel Finance NV	Netherlands	Full	100,0%	50,0%	D1	Equity *	100,0%	50,0%	E3
Opel Finance NV (Belgium branch)	Belgium				S1	Equity *	100,0%	50,0%	E3
Opel Finance SA	Switzerland	Full	100,0%	50,0%	D1	Equity *	100,0%	50,0%	E3
Opel Finance SPA	Italy	Full	100,0%	50,0%		Full	100,0%	50,0%	E3
Opel Leasing GmbH	Germany	Full	100,0%	50,0%		Full	100,0%	50,0%	E3
Opel Leasing GmbH (Austria branch)	Austria	Full	100,0%	50,0%		Full	100,0%	50,0%	E3
OPVF Europe Holdco Ltd	UK				S4	Full	100,0%	50,0%	E3
OPVF Holdings UK Ltd	UK				S1	Full	100,0%	50,0%	E3
Prêts et Services SAS	France								S4
Projeo	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
RCS Cards Pty Ltd	South Africa	Full	100,0%	100,0%		Full	100,0%	100,0%	
Retail Mobile Wallet	France								S4
Servicios Financieros Carrefour EFC SA	Spain	Equity	37,3%	40,0%		Equity	37,3%	40,0%	
Sevenday Finans AB	Sweden				S4	Full	100,0%	100,0%	E3
Sundaram BNPP Home Finance Ltd	India	Equity (3)	49,9%	49,9%		Equity (3)	49,9%	49,9%	
Suning Consumer Finance Co Ltd	China	Equity	15,0%	15,0%		Equity	15,0%	15,0%	
Sygma Funding Two Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
Symag	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
TEB Finansman AS	Turkey	Full	100,0%	92,8%		Full	100,0%	92,8%	
UCB Ingatlanhitel ZRT	Hungary	Full	100,0%	100,0%		Full	100,0%	100,0%	
Union de Creditos Inmobiliarios SA	Spain	Equity (3)	50,0%	50,0%		Equity (3)	50,0%	50,0%	
United Partnership	France	Equity (3)	50,0%	50,0%	E1				
Vauxhall Finance PLC	UK	Full	100,0%	50,0%		Full	100,0%	50,0%	E3
Von Essen Bank GmbH	Germany	Full	100,0%	99,9%		Full	100,0%	99,9%	
Structured Entities									
B Carat	Belgium				S1	Equity *	-	-	E3
Cartolarizzazione Auto Receivable's SRL	Italy				S3	Full	-	-	E3
Cofinoga Funding Two LP	UK	Full	-	-		Full	-	-	
Ecarat SA	Luxembourg	Full	-	-		Full	-	-	E3
Ecarat UK (a)	UK	Full	-	-		Full	-	-	
FCC Retail ABS Finance Noria 2009	France								S1
FCT F Carat	France				S1	Full	-	-	E3
Florence 1 SRL	Italy				S1	Full	-	-	
Florence SPV SRL	Italy	Full	-	-		Full	-	-	
I Carat SRL	Italy				S1	Full	-	-	E3
Laser ABS 2017 PLC	UK	Full	-	-		Full	-	-	E1
Noria 2015	France								S1
Noria 2018-1	France	Full	-	-	E2				
Phedina Hypotheken 2010 BV	Netherlands	Full	-	-		Full	-	-	
Phedina Hypotheken 2013 I BV	Netherlands	Full	-	-		Full	-	-	
Securely Transferred Auto Receivables II SA	Luxembourg				S3	Full	-	-	E3
Securitisation funds Autonoria (c)	France	Full	-	-		Full	-	-	
Securitisation funds Domos (d)	France	Full	-	-		Full	-	-	
Securitisation funds UCI and RMBS Prado (b)	Spain	Equity (3)	-	-		Equity (3)	-	-	
Vault Funding Ltd	UK				S3	Full	-	-	E3
Warf 2012 Ltd	UK				S3	Full	-	-	E3
International Retail Banking - BancWest									
1897 Services Corp	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BancWest Corp	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BancWest Holding Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BancWest Investment Services Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Bank of the West	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Bishop Street Capital Management Corp	USA				V3/S2	Full	100,0%	61,9%	V3
BNPP Leasing Solutions Canada Inc	Canada	Full	100,0%	100,0%	E1				
Center Club Inc	USA				V3/S2	Full	100,0%	61,9%	V3
CFB Community Development Corp	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Claas Financial Services LLC	USA	Full	51,0%	51,0%		Full	51,0%	51,0%	
Commercial Federal Affordable Housing Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Commercial Federal Community Development Corp	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Commercial Federal Insurance Corp	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Commercial Federal Investment Service Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
FHB Guam Trust Co	USA								S1
FHL SPC One Inc	USA				V3/S2	Full	100,0%	61,9%	V3
First Hawaiian Bank	USA				V3/S2	Full	100,0%	61,9%	V3
First Hawaiian Inc	USA	Equity	18,4%	18,4%	V2	Full	61,9%	61,9%	V2

Name	Country	31 December 2018 Method	Voting (%)	Interest (%)	Ref.	31 December 2017 Method	Voting (%)	Interest (%)	Ref.
First Hawaiian Leasing Inc	USA				V3/S2	Full	100,0%	61,9%	V3
Liberty Leasing Co	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Mountain Falls Acquisition Corp	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Real Estate Delivery 2 Inc	USA				V3/S2	Full	100,0%	61,9%	V3
Riverwalk Village Three Holdings LLC	USA								S1
Santa Rita Townhomes Acquisition LLC	USA								S1
The Bankers Club Inc	USA				V3/S2	Full	100,0%	61,9%	V3
Ursus Real Estate Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Structured Entities									
Bank of the West Auto Trust 2014-1	USA				S1	Full	-	-	
Bank of the West Auto Trust 2015-1	USA				S2	Full	-	-	
Bank of the West Auto Trust 2017-1	USA				S2	Full	-	-	
Bank of the West Auto Trust 2018-1 (Ex- Bank of the West Auto Trust 2016-2)	USA	Full	-	-		Full	-	-	
Bank of the West Auto Trust 2018-2	USA	Full	-	-	E2				
BOW Auto Receivables LLC	USA	Full	-	-		Full	-	-	
BWC Opportunity Fund Inc	USA	Full	-	-	E2				
First Bancorp	USA	Full	-	-		Full	-	-	
First National Bancorporation	USA	Full	-	-		Full	-	-	
First Santa Clara Corp	USA	Full	-	-		Full	-	-	
Glendale Corporate Center Acquisition LLC	USA				S2	Full	-	-	
LACMTA Rail Statutory Trust FH1	USA				V3/S2	Full	-	-	
ST 2001 FH 1 Statutory Trust	USA				V3/S2	Full	-	-	
VTA 1998 FH	USA				S1	Full	-	-	
International Retail Banking - Europe-Mediterranean									
Bank BGZ BNPP SA	Poland	Full	88,8%	88,7%	V4	Full	88,3%	88,3%	
Bank of Nanjing	China	Equity	15,0%	15,0%	V2	Equity	18,2%	18,2%	V2
Banque Internationale pour le Commerce et l'Industrie de la Côte d'Ivoire	Ivory Coast	Full	59,8%	59,8%		Full	59,8%	59,8%	
Banque Internationale pour le Commerce et l'Industrie de la Guinée	Guinea	Full	55,6%	55,6%		Full	55,6%	55,6%	
Banque Internationale pour le Commerce et l'Industrie du Burkina Faso	Burkina Faso	Full	51,0%	51,0%		Full	51,0%	51,0%	
Banque Internationale pour le Commerce et l'Industrie du Gabon	Gabon	Equity	47,0%	47,0%		Equity	47,0%	47,0%	
Banque Internationale pour le Commerce et l'Industrie du Mali	Mali	Full	85,0%	85,0%		Full	85,0%	85,0%	
Banque Internationale pour le Commerce et l'Industrie du Sénégal	Senegal	Full	54,1%	54,1%		Full	54,1%	54,1%	
Banque Marocaine pour le Commerce et l'Industrie	Morocco	Full	67,0%	67,0%		Full	67,0%	67,0%	
Banque Marocaine pour le Commerce et l'Industrie Banque Offshore	Morocco	Full	100,0%	67,0%		Full	100,0%	67,0%	
Banque pour l'Industrie et le Commerce des Comores	Comoros	Full	51,0%	51,0%	E1				
Bantas Nakit AS	Turkey	Equity (3)	33,3%	16,7%	E1				
BGZ BNPP Faktoring Spolka ZOO	Poland	Full	100,0%	100,0%		Full	100,0%	100,0%	E1
BICI Bourse	Ivory Coast	Full	90,0%	53,5%	D1	Equity *	90,0%	53,5%	
BMCI Asset Management	Morocco								S3
BMCI Assurance SARL	Morocco								S3
BMCI Leasing	Morocco	Full	86,9%	58,2%		Full	86,9%	58,2%	
BNPP El Djazair	Algeria	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Fortis Yatirimlar Holding AS	Turkey	Full	100,0%	99,9%		Full	100,0%	99,9%	
BNPP IRB Participations	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Solutions Spolka ZOO	Poland	Full	100,0%	88,7%	E3				
BNPP Yatirimlar Holding AS	Turkey	Full	100,0%	100,0%		Full	100,0%	100,0%	
IC Axa Insurance JSC	Ukraine	Equity	49,8%	29,9%		Equity	49,8%	29,9%	
TEB Faktoring AS	Turkey	Full	100,0%	72,5%		Full	100,0%	72,5%	
TEB Holding AS	Turkey	Full	50,0%	50,0%		Full	50,0%	50,0%	
TEB Portfoy Yonetimi AS	Turkey	Full	54,8%	39,7%	V3	Full	100,0%	72,5%	
TEB SH A	Serbia	Full	100,0%	50,0%		Full	100,0%	50,0%	
TEB Yatirim Menkul Degerler AS	Turkey	Full	100,0%	72,5%		Full	100,0%	72,5%	
Turk Ekonomi Bankasi AS	Turkey	Full	100,0%	72,5%		Full	100,0%	72,5%	
UkrSibbank Public JSC	Ukraine	Full	60,0%	60,0%		Full	60,0%	60,0%	
Union Bancaire pour le Commerce et l'Industrie	Tunisia	Full	50,1%	50,1%		Full	50,1%	50,1%	
Structured Entities									
BGZ Poland ABS1 DAC	Ireland	Full	-	-		Full	-	-	E1
Insurance									
AG Insurance	Belgium	Equity	25,0%	25,0%		Equity	25,0%	25,0%	
Agathe Retail France	France	FV	33,3%	33,3%	E1				
Batipart Participations SAS	Luxembourg	FV	29,7%	29,7%	E3				
BNPP Cardif	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
BNPP Cardif BV	Netherlands	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
BNPP Cardif Compania de Seguros y Reaseguros SA	Peru	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	E1
BNPP Cardif Emeklilik AS	Turkey	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
BNPP Cardif General Insurance Co Ltd	Rep. of Korea	Equity *	90,0%	90,0%		Equity *	90,0%	90,0%	V1
BNPP Cardif Hayat Sigorta AS	Turkey	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	E1
BNPP Cardif Levensverzekeringen NV	Netherlands	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
BNPP Cardif Pojistovna AS	Czech Rep.	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
BNPP Cardif Schadeverzekeringen NV	Netherlands	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
BNPP Cardif Seguros de Vida SA	Chile	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
BNPP Cardif Seguros Generales SA	Chile	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
BNPP Cardif Servicios y Asistencia Ltda	Chile	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
BNPP Cardif Sigorta AS	Turkey	Equity *	100,0%	100,0%	E1				
BNPP Cardif TCB Life Insurance Co Ltd	Taiwan	Equity	49,0%	49,0%		Equity	49,0%	49,0%	
BNPP Cardif Vita Compagnia di Assicurazione E Riassicurazione SPA	Italy	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
BOB Cardif Life Insurance Co Ltd	China	Equity	50,0%	50,0%		Equity	50,0%	50,0%	
Cardif Assurance Vie	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Austria branch)	Austria	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Belgium branch)	Belgium	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Bulgaria branch)	Bulgaria	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Germany branch)	Germany	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Italy branch)	Italy	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Japan branch)	Japan	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Portugal branch)	Portugal	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Romania branch)	Romania	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Spain branch)	Spain	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Switzerland branch)	Switzerland	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurance Vie (Taiwan branch)	Taiwan	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Austria branch)	Austria	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Belgium branch)	Belgium	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Bulgaria branch)	Bulgaria	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Germany branch)	Germany	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Italy branch)	Italy	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Japan branch)	Japan	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Luxembourg branch)	Luxembourg	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Poland branch)	Poland	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Portugal branch)	Portugal	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Romania branch)	Romania	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Spain branch)	Spain	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Switzerland branch)	Switzerland	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Assurances Risques Divers (Taiwan branch)	Taiwan	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Biztosito Magyarorszag ZRT	Hungary	Equity *	100,0%	100,0%	E1				
Cardif Colombia Seguros Generales SA	Colombia	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Courtage (Ex- Cardif I Services)	France								S3
Cardif do Brasil Seguros e Garantias SA	Brazil	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif do Brasil Vida e Previdencia SA	Brazil	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif El Djazair	Algeria	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Cardif Forsakring AB	Sweden	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Cardif Forsakring AB (Denmark branch)	Denmark	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Cardif Forsakring AB (Norway branch)	Norway	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Cardif IARD	France	Full (2)	66,0%	66,0%	V3/D1	Equity *	83,3%	83,3%	E1
Cardif Insurance Co LLC	Russia	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Life	Luxembourg	Full (2)	100,0%	88,6%	E3/V4				
Cardif Life Insurance Co Ltd	Rep. of Korea	Full (2)	85,0%	85,0%		Full (2)	85,0%	85,0%	
Cardif Life Insurance Japan	Japan	Full (2)	75,0%	75,0%	E1				
Cardif Livforsakring AB	Sweden	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Cardif Livforsakring AB (Denmark branch)	Denmark	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Cardif Livforsakring AB (Norway branch)	Norway	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Cardif Ltda	Brazil	Equity *	100,0%	100,0%	E1				
Cardif Lux Vie	Luxembourg	Full (2)	100,0%	88,6%	V1	Full (2)	66,7%	55,3%	
Cardif Mexico Seguros de Vida SA de CV	Mexico	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Cardif Mexico Seguros Generales SA de CV	Mexico	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Cardif Non Life Insurance Japan	Japan	Full (2)	100,0%	75,0%	E1				
Cardif Nordic AB	Sweden	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Osiguranje Dionicko Drustvo ZA	Croatia								S2
Cardif Pinnacle Insurance Holdings PLC	UK	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Pinnacle Insurance Management Services PLC	UK	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Polska Towarzystwo Ubezpieczen Na Zycie SA	Poland	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Cardif Seguros SA	Argentina	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cardif Servicios SA	Argentina	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	E1
Cardif Servicios SAC	Peru	Equity *	100,0%	100,0%	E1				
Cardimmo	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cargeas Assicurazioni SPA	Italy	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	V1
Carma Grand Horizon SARL	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
CB UK Ltd	UK	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
CFH Algonquin Management Partners France Italia	Italy	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
CFH Bercy	France	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
CFH Bercy Hotel	France	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
CFH Bercy Intermédiaire	France	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
CFH Boulogne	France	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
CFH Cap d'Ail	France	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
CFH Milan Holdco SRL	Italy	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
CFH Montmartre	France	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
CFH Montparnasse	France	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
Corosa	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
Darnell DAC	Ireland	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Défense CB3 SAS	France	FV	25,0%	25,0%	E1				
Fleur SAS	France	FV	33,3%	33,3%	E1				
Fonds d'Investissements Immobiliers pour le Commerce et la Distribution	France	FV	25,0%	25,0%	E1				
GIE BNPP Cardif	France	Full (2)	100,0%	100,0%	V4	Full (2)	100,0%	99,0%	
Harewood Helena 2 Ltd	UK	Full (2)	100,0%	100,0%	E1				
Hibernia France	France	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
Icare	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Icare Assurance	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Luizaseg	Brazil	Equity	50,0%	50,0%		Equity	50,0%	50,0%	
Natio Assurance	France	Full (2)	100,0%	100,0%	V1	Equity	50,0%	50,0%	
NCVP Participacoes Societarias SA	Brazil	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Pinnacle Insurance PLC	UK	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Poistovna Cardif Slovakia AS	Slovakia	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Reumal Investissements	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
Rueil Ariane	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SAS HVP	France	Full (2)	100,0%	98,4%	V3	Full (2)	100,0%	98,6%	E1
SCI 68/70 rue de Lagny - Montreuil	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Alpha Park	France	FV	50,0%	50,0%	E1				
SCI BNPP Pierre I	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI BNPP Pierre II	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Bobigny Jean Rostand	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Bouleragny	France	FV	50,0%	50,0%	E1				
SCI Cardif Logement	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Citylight Boulogne	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Clichy Nuovo	France	FV	50,0%	50,0%	E1				
SCI Défense Etoile	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Défense Vendôme	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Etoile du Nord	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Fontenay Plaisance	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Imefa Velizy	France	FV	21,8%	21,8%	E1				
SCI Le Mans Gare	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Liberté	France	FV	50,0%	50,0%	E1				
SCI Nanterre Guilleraies	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Nantes Carnot	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Odyssée	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
SCI Pantin Les Moulins	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Paris Batignolles	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Paris Cours de Vincennes	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Portes de Claye	France	Equity	45,0%	45,0%		Equity	45,0%	45,0%	

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
SCI Rue Moussorgski	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Rueil Caudron	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Saint Denis Landy	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Saint Denis Mitterrand	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI Saint-Denis Jade (Ex- SCI Porte d'Asnières)	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
SCI SCOO	France	Equity	46,4%	46,4%		Equity	46,4%	46,4%	
SCI Vendôme Athènes	France	FV	50,0%	50,0%	E1				
SCI Villeurbanne Stalingrad	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
Secar	France	FV	59,0%	59,0%	E1				
Seniorenzentren Reinbeck Oberursel München Objekt GmbH	Germany	FV	35,0%	31,0%	E3				
Seniorenzentrum Butzbach Objekt GmbH	Germany	FV	35,0%	31,0%	E3				
Seniorenzentrum Heilbronn Objekt GmbH	Germany	FV	35,0%	31,0%	E3				
Seniorenzentrum Kassel Objekt GmbH	Germany	FV	35,0%	31,0%	E3				
Seniorenzentrum Wolfratshausen Objekt GmbH	Germany	FV	35,0%	31,0%	E3				
Société Francaise d'Assurances sur la Vie	France	Equity	50,0%	50,0%		Equity	50,0%	50,0%	E1
Société Immobilière du Royal Building SA	Luxembourg	Full (2)	100,0%	88,6%	V4	Full (2)	100,0%	55,3%	
State Bank of India Life Insurance Co Ltd	India	Equity	22,0%	22,0%		Equity	22,0%	22,0%	V2
Valeur Pierre Epargne	France	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	E1
Velizy SAS	France	FV	33,3%	33,3%	E1				
Vietcombank Cardif Life Insurance Co Ltd	Viet Nam	Equity	43,0%	43,0%	E1				
Structured Entities									
AEW Immocommercial	France	FV	-	-	E1				
Ambrosia Avril 2025	France	Full (4)	-	-	E1				
BNPP ABS Europe AAA	France	Full (4)	-	-	E1				
BNPP ABS Europe IG	France	Full (4)	-	-	E1				
BNPP ABS Opportunities	France	Full (4)	-	-	E1				
BNPP Actions Entrepreneurs (Ex- Camgestion Euro Mid Cap)	France	Full (4)	-	-	E1				
BNPP Actions Euroland	France	Full (4)	-	-		Full (4)	-	-	
BNPP Actions Monde	France	Full (4)	-	-	E1				
BNPP Actions PME	France	Full (4)	-	-	E1				
BNPP Aqua	France	Full (4)	-	-		Full (4)	-	-	
BNPP Convictions	France	Full (4)	-	-		Full (4)	-	-	
BNPP CP Cardif Alternative	France	Full (2)	-	-		Full (4)	-	-	E1
BNPP CP Cardif Private Debt	France	Full (2)	-	-		Full (4)	-	-	E1
BNPP Développement Humain	France	Full (4)	-	-		Full (4)	-	-	
BNPP Diversipierre	France	Full (2)	-	-		Full (2)	-	-	E1
BNPP Euro Valeurs Durables	France	Full (4)	-	-	E1				
BNPP France Crédit	France	Full (2)	-	-		Full (4)	-	-	E1
BNPP Global Senior Corporate Loans	France	Full (4)	-	-		Full (4)	-	-	
BNPP Indice Amerique du Nord	France	Full (4)	-	-	E1				
BNPP Indice Euro	France	Full (4)	-	-		Full (4)	-	-	E1
BNPP L1	Luxembourg	Full (4)	-	-	E1				
BNPP Midcap France	France	Full (4)	-	-	E1				
BNPP Monétaire Assurance	France	Full (4)	-	-	E1				
BNPP Perspectives	France	Full (4)	-	-	E1				
BNPP Protection Monde	France	Full (4)	-	-	E1				
BNPP Sélection Dynamique Monde	France	Full (4)	-	-	E1				
BNPP Sélection Flexible	France	Full (4)	-	-	E1				
C Santé	France	Full (2)	-	-	E1				
Camgestion Actions Croissance	France	Full (4)	-	-	E1				
Camgestion Actions Euro	France	Full (4)	-	-	E1				
Camgestion Obliflexible	France	Full (2)	-	-		Full (4)	-	-	E1
Camgestion Rendactis	France	Full (4)	-	-	E1				
Capital France Hotel	France	Full (2)	-	-		Full (2)	-	-	E1
Cardif Alternatives Part I	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif BNPP IP Convertibles World	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif BNPP IP Equity Frontier Markets	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif BNPP IP Signatures	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif BNPP IP Smid Cap Euro	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif BNPP IP Smid Cap Europe	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif CPR Global Return (Ex- Cardif CPR Base Credit)	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif Edrim Signatures	France	Full (2)	-	-		Full (4)	-	-	E1
Cardif Vita Convex Fund Eur	France	Full (2)	-	-		Full (4)	-	-	E1
Cedrus Carbon Initiative Trends	France	Full (2)	-	-		Full (4)	-	-	E1
EP L	France	Full (2)	-	-		Full (2)	-	-	E1
Foncière Partenaires	France	FV	-	-	E1				
FP Cardif Convex Fund USD	France	Full (2)	-	-		Full (4)	-	-	E1
Fundamenta	Italy	Full (2)	-	-		Full (2)	-	-	E1
Fundquest	France	Full (4)	-	-	E1				
G C Thematic Opportunities II	Ireland	Full (2)	-	-		Full (4)	-	-	E1
Natio Fonds Ampère 1	France	Full (4)	-	-		Full (4)	-	-	
Natio Fonds Athenes Investissement N 5	France	Full (2)	-	-	V4	Full (4)	-	-	E1
Natio Fonds Colline International	France	Full (2)	-	-		Full (4)	-	-	E1
Natio Fonds Collines Investissement N 1	France	Full (2)	-	-		Full (4)	-	-	E1
Natio Fonds Collines Investissement N 3	France	Full (2)	-	-		Full (4)	-	-	E1
New Alpha Cardif Incubator Fund	France	Full (2)	-	-		Full (4)	-	-	E1
Opéra Rendement	France	Full (2)	-	-		Full (2)	-	-	E1
Parvest	Luxembourg	Full (4)	-	-	E1				
Parworld	Luxembourg	Full (4)	-	-	E1				
Permal Cardif Co Investment Fund	France	Full (2)	-	-		Full (4)	-	-	E1
Preim Healthcare SAS	France	FV	-	-	E1				
PWH	France	FV	-	-	E1				
Rubin SARL	Luxembourg	FV	-	-	E1				
Seniorenzentren Deutschland Holding SARL	Luxembourg	FV	-	-	E1				
Theam Quant	Luxembourg	Full (4)	-	-	E1				
Tikehau Cardif Loan Europe	France	Full (2)	-	-		Full (4)	-	-	E1
Valtitres FCP	France	Full (2)	-	-		Full (4)	-	-	E1
Wealth Management									
BNPP Espana SA	Spain	Full	99,7%	99,7%		Full	99,7%	99,7%	
BNPP Wealth Management Monaco	Monaco	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
SNC Conseil Investissement	France								S3
Asset Management (Ex- Investment Partners)									
Alfred Berg Asset Management AB	Sweden				S4	Full	100,0%	98,3%	
Alfred Berg Asset Management AB (Finland branch)	Finland								S1
Alfred Berg Asset Management AB (Norway branch)	Norway								S1
Alfred Berg Fonder AB	Sweden								S3
Alfred Berg Kapitalforvaltning AB	Sweden	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
Alfred Berg Kapitalforvaltning AS	Norway	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
Alfred Berg Kapitalforvaltning Finland AB	Finland								S2
Alfred Berg Rahastoyhtio OY	Finland								S2
Bancoestado Administradora General de Fondos SA	Chile	Equity	50,0%	49,1%	V3	Equity	50,0%	49,1%	

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNPP Asset Management Asia Ltd	Hong Kong	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management Australia Ltd	Australia								S3
BNPP Asset Management Be Holding	Belgium	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management Belgium	Belgium	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management Belgium (Germany branch)	Germany	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management Brasil Ltda	Brazil	Full	100,0%	99,5%	V3	Full	100,0%	99,6%	
BNPP Asset Management France	France	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management France (Austria branch)	Austria	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management France (Italy branch)	Italy	Full	100,0%	98,2%	E2				
BNPP Asset Management Holding	France	Full	99,9%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management India Private Ltd	India	Full	100,0%	98,2%	D1	Equity *	100,0%	98,3%	
BNPP Asset Management Japan Ltd	Japan	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management Luxembourg	Luxembourg	Full	99,7%	97,9%	V3	Full	99,7%	98,0%	
BNPP Asset Management Nederland NV	Netherlands	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management Netherlands NV	Netherlands	Full	100,0%	98,3%		Full	100,0%	98,3%	
BNPP Asset Management NL Holding NV	Netherlands	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management Services Grouping	France	Full	100,0%	98,2%	E1/V3				
BNPP Asset Management Singapore Ltd	Singapore								S3
BNPP Asset Management UK Ltd	UK	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Asset Management USA Holdings Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Asset Management USA Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Capital Partners	France	Full	100,0%	100,0%	D1	Equity *	100,0%	100,0%	
BNPP Dealing Services	France	Full (1)	100,0%	98,2%	V3	Full (1)	100,0%	98,3%	V3
BNPP Dealing Services (United Kingdom branch)	UK				S1	Full (1)	100,0%	98,3%	V3
BNPP Dealing Services Asia Ltd	Hong Kong								S3
BNPP Investment Partners Argentina SA	Argentina								S3
BNPP Investment Partners Australia Holdings Pty Ltd	Australia								S3
BNPP Investment Partners Latam SA de CV	Mexico								S3
BNPP Investment Partners PT	Indonesia	Full	100,0%	98,2%	V3	Full	100,0%	98,3%	
BNPP Investment Partners SGR SPA	Italy				S4	Full	100,0%	98,3%	V3
Camgestion	France								S4
Elite Asset Management PLC	Finland	Equity	19,0%	18,7%	V3	Equity	19,0%	18,7%	E3
EMZ Partners	France	Equity	24,9%	24,9%	E1				
Fund Channel	Luxembourg	Equity (3)	50,0%	49,1%	V3	Equity (3)	50,0%	49,1%	
Fundquest Advisor	France	Full	100,0%	98,2%	D1/V3	Equity *	100,0%	98,3%	
Fundquest Advisor (United Kingdom branch)	UK	Full	100,0%	98,2%	D1/V3	Equity *	100,0%	98,3%	
Gambit Financial Solutions	Belgium	Full	86,0%	84,4%	E1/V3				
Groeivermogen NV	Netherlands	Full	100,0%	98,2%	E1				
Haitong Fortis Private Equity Fund Management Co Ltd	China	Equity	33,0%	32,4%		Equity	33,0%	32,4%	
Harewood Helena 1 Ltd	UK	Full	100,0%	100,0%	E1				
HFT Investment Management Co Ltd	China	Equity	49,0%	48,1%	V3	Equity	49,0%	48,2%	
Impax Asset Management Group PLC	UK	Equity	24,5%	24,0%	V3	Equity	25,0%	24,6%	E1
Services Epargne Entreprise	France	Equity	37,1%	37,1%	E1				
Shinhan BNPP Asset Management Co Ltd	Rep. of Korea	Equity	35,0%	34,4%	V3	Equity	35,0%	34,4%	
Theam	France								S4
Structured Entities									
SME Alternative Financing DAC	Ireland	Full	-	-	E1				
Real Estate Services									
99 West Tower GmbH & Co KG	Germany	Full	100,0%	100,0%		Full	100,0%	100,0%	E3
99 West Tower GP GmbH	Germany	Full	100,0%	100,0%		Full	100,0%	100,0%	E3
Auguste Thouard Expertise	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Immobilier Promotion Immobilier d'Entreprise	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Immobilier Promotion Résidentiel	France				S4	Full	100,0%	100,0%	
BNPP Immobilier Résidences Services	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Immobilier Résidentiel	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Immobilier Résidentiel Service Clients	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate (United Arab Emirates branch)	United Arab Emirates	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Advisory & Property Management Luxembourg SA	Luxembourg	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Advisory & Property Management UK Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Advisory and Property Management Ireland Ltd	Ireland	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Advisory Belgium SA	Belgium	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Advisory Italy SPA	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Advisory Netherlands BV	Netherlands	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Advisory SA	Romania	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Advisory Spain SA	Spain	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate APM CR SRO	Czech Rep.	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Conseil Habitation & Hospitality (Ex- BNPP Immobilier Résidentiel Transaction & Conseil)	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Consult France	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Consult GmbH	Germany	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Facilities Management Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Financial Partner	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate GmbH	Germany	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Holding Benelux SA	Belgium	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Holding GmbH	Germany	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Holding Netherlands BV	Netherlands				S4	Full	100,0%	100,0%	
BNPP Real Estate Hotels France	France								S4
BNPP Real Estate Investment Management Belgium	Belgium	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Investment Management France	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Investment Management Germany GmbH	Germany	Full	94,9%	94,9%		Full	94,9%	94,9%	
BNPP Real Estate Investment Management Germany GmbH (Italy branch)	Italy	Full	94,9%	94,9%		Full	94,9%	94,9%	
BNPP Real Estate Investment Management Germany GmbH (Spain branch)	Spain	Full	94,9%	94,9%		Full	94,9%	94,9%	
BNPP Real Estate Investment Management International GmbH	Germany	Full	100,0%	100,0%	E2				
BNPP Real Estate Investment Management Italy SPA	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Investment Management Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Investment Management Luxembourg SA	Luxembourg	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Investment Management Spain SA	Spain	Full	100,0%	100,0%		Full	100,0%	100,0%	

Name	Country	31 December 2018 Method	Voting (%)	Interest (%)	Ref.	31 December 2017 Method	Voting (%)	Interest (%)	Ref.
BNPP Real Estate Investment Management UK Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Investment Services	France				S4	Full	100,0%	100,0%	
BNPP Real Estate Italy SRL	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Jersey Ltd	Jersey								S2
BNPP Real Estate Magyarorszag Tanacsado Es Ingatlankezelo ZRT	Hungary	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Poland SP ZOO	Poland	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Property Development UK Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Property Developpement Italy SPA	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Property Management Belgium	Belgium	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Property Management France SAS	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Property Management GmbH	Germany	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Property Management Italy SRL	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Real Estate Property Management Spain SA	Spain				S4	Full	100,0%	100,0%	
BNPP Real Estate Transaction France	France	Full	96,0%	96,0%	V2	Full	96,1%	96,1%	V2
BNPP Real Estate Valuation France	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Construction-Sale Companies (Real Estate programmes) (e)	France	Full / Equity	-	-		Full / Equity	-	-	
FG Ingénierie et Promotion Immobilière	France								S4
GIE Siège Issy	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Horti Milano SRL	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	E1
Immobilière des Bergues	France								S4
Lifizz	France	Full	100,0%	100,0%	E2				
Locchi SRL	Italy				S3	Full	100,0%	100,0%	
Parker Tower Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
Partner's & Services	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Pyrotex GB 1 SA	Luxembourg				S4	Full	100,0%	100,0%	
Pyrotex SARL	Luxembourg	Full	100,0%	100,0%		Full	100,0%	100,0%	
REPD Parker Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
Société Auxiliaire de Construction Immobilière	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Sviluppo Residenziale Italia SRL	Italy	Full	100,0%	100,0%		Full	100,0%	100,0%	
Corporate & Institutional Banking									
Securities Services									
BNPP Financial Services LLC	USA	Full	100,0%	100,0%	E1				
BNPP Fund Administration Services Ireland Ltd	Ireland	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Fund Services Australasia Pty Ltd	Australia	Full	100,0%	100,0%	D1	Equity *	100,0%	100,0%	
BNPP Fund Services Australasia Pty Ltd (New zealand branch)	New Zealand	Full	100,0%	100,0%	D1	Equity *	100,0%	100,0%	
BNPP Global Securities Operations Private Ltd	India	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Securities Services	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Australia branch)	Australia	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Belgium branch)	Belgium	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Germany branch)	Germany	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Greece branch)	Greece	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Guernsey branch)	Guernsey	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Hong kong branch)	Hong Kong	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Hungary branch)	Hungary	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Ireland branch)	Ireland	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Italy branch)	Italy	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Jersey branch)	Jersey	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Luxembourg branch)	Luxembourg	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Netherlands branch)	Netherlands	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Poland branch)	Poland	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Portugal branch)	Portugal	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Singapore branch)	Singapore	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Spain branch)	Spain	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (Switzerland branch)	Switzerland	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Securities Services (United Kingdom branch)	UK	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
Services Logiciels d'Intégration Boursière	France	Equity (3)	66,6%	66,6%	E1				
CIB EMEA (Europe, Moyen Orient, Afrique)									
France									
BNPP Arbitrage	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Arbitrage (United Kingdom branch)	UK				S1	Full (1)	100,0%	100,0%	
Esomet	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Eurotitrisation	France	Equity	23,0%	23,0%	E1				
Financière du Marché Saint Honoré	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Laffitte Participation 22	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Opéra Trading Capital	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Opéra Trading Capital (Hong Kong branch)	Hong Kong	Full	100,0%	100,0%		Full	100,0%	100,0%	
Opéra Trading Capital (United Kingdom branch)	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
Parilease	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
SNC Taitbout Participation 3	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Verner Investissements	France	Equity	40,0%	50,0%		Equity	40,0%	50,0%	
Structured Entities									
Auseter Real Estate Opportunities SARL	Luxembourg	Full	-	-	E1				
Atargatis	France	Full	-	-		Full	-	-	
Austin Finance	France	Full	-	-		Full	-	-	
Compagnie d'Investissement Italiens	France	Full	-	-		Full	-	-	
Compagnie d'Investissement Opéra	France	Full	-	-		Full	-	-	
FCT Juice	France	Full	-	-	E2				
Financière des Italiens	France	Full	-	-		Full	-	-	
Financière Paris Haussmann	France	Full	-	-		Full	-	-	
Financière Taitbout	France	Full	-	-		Full	-	-	
Mediterranea	France	Full	-	-		Full	-	-	
Optichamps	France	Full	-	-		Full	-	-	
Participations Opéra	France	Full	-	-		Full	-	-	
Other European countries									
Alpha Murcia Holding BV	Netherlands				S1	Equity *	100,0%	99,9%	
BNP PUK Holding Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Bank JSC	Russia	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Commodity Futures Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Emissions- Und Handels- GmbH	Germany	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Invest Holdings BV	Netherlands	Full	100,0%	100,0%		Full	100,0%	100,0%	E1
BNPP Ireland Unlimited Co	Ireland	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Islamic Issuance BV	Netherlands	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Issuance BV	Netherlands	Full	100,0%	100,0%		Full	100,0%	100,0%	

Name	Country	31 December 2018 Method	Voting (%)	Interest (%)	Ref.	31 December 2017 Method	Voting (%)	Interest (%)	Ref.
BNPP Net Ltd	UK	Full	100,0%	100,0%	D1	Equity *	100,0%	100,0%	
BNPP Prime Brokerage International Ltd	Ireland	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP UK Holdings Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP UK Ltd	UK				S3	Full	100,0%	100,0%	
BNPP Vartry Reinsurance DAC	Ireland	Full	100,0%	100,0%	D1	Equity *	100,0%	100,0%	
Diamante Re SRL	Italy	Full	100,0%	100,0%	E1				
Financière Hime SA	Luxembourg	Equity	22,5%	22,5%		Equity	22,5%	22,5%	E1
FScholen	Belgium	Equity (3)	50,0%	50,0%		Equity (3)	50,0%	50,0%	
Greenstars BNPP	Luxembourg	Equity *	100,0%	100,0%		Equity *	100,0%	100,0%	
Harewood Holdings Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
Hime Holding 1 SA	Luxembourg	Equity	26,4%	26,4%		Equity	26,4%	26,4%	E1
Hime Holding 2 SA	Luxembourg	Equity	21,0%	21,0%		Equity	21,0%	21,0%	E1
Hime Holding 3 SA	Luxembourg	Equity	20,6%	20,6%		Equity	20,6%	20,6%	E1
Landspire Ltd	UK	Full	100,0%	100,0%		Full	100,0%	100,0%	
Ribera Del Loira Arbitrage	Spain	Full	100,0%	100,0%	E1				
SC Nueva Condo Murcia SL	Spain								S2
Utexam Logistics Ltd	Ireland	Full	100,0%	100,0%		Full	100,0%	100,0%	
Utexam Solutions Ltd	Ireland	Full	100,0%	100,0%		Full	100,0%	100,0%	
Structured Entities									
Alectra Finance PLC	Ireland	Full	-	-		Full	-	-	
Aquarius + Investments PLC	Ireland	Full	-	-		Full	-	-	
Aries Capital DAC	Ireland	Full	-	-		Full	-	-	E1
BNPP International Finance Dublin Unlimited Company	Ireland	Full	-	-		Full	-	-	
BNPP Investments N 1 Ltd	UK				S1	Full	-	-	
BNPP Investments N 2 Ltd	UK				S1	Full	-	-	
Boug BV	Netherlands	Full	-	-		Full	-	-	
Boug BV (United Kingdom branch)	UK	Full	-	-		Full	-	-	
Madison Arbor Ltd	Ireland	Full	-	-		Full	-	-	
Matchpoint Finance PLC	Ireland	Full	-	-		Full	-	-	
Omega Capital Funding Ltd	Ireland								S1
Omega Capital Investments PLC	Ireland								S1
Scaldis Capital Ltd	Jersey	Full	-	-		Full	-	-	
Middle East									
BNPP Investment Co KSA	Saudi Arabia	Full	100,0%	100,0%	D1	Equity *	100,0%	100,0%	
Africa									
BNPP Securities South Africa Holdings Pty Ltd	South Africa								S3
BNPP Securities South Africa Pty Ltd	South Africa								S3
CIB Americas									
Banco BNPP Brasil SA	Brazil	Full	100,0%	100,0%		Full	100,0%	100,0%	
Banexi Holding Corp	USA				S4	Full	100,0%	100,0%	
BNPP Canada Corp	Canada	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Canada Valeurs Mobilières Inc	Canada								S3
BNPP Capital Services Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP CC Inc	USA				S4	Full	100,0%	100,0%	
BNPP Colombia Corporacion Financiera SA	Colombia	Full	100,0%	100,0%		Full	100,0%	100,0%	D1
BNPP Energy Trading GP	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Energy Trading Holdings Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Energy Trading LLC	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP FS LLC	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP IT Solutions Canada Inc	Canada	Full	100,0%	100,0%		Full	100,0%	100,0%	D1
BNPP Leasing Corp	USA								S1
BNPP Prime Brokerage Inc	USA				S4	Full	100,0%	100,0%	
BNPP RCC Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Securities Corp	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP US Wholesale Holdings Corp	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP USA Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Dale Bakken Partners 2012 LLC	USA	FV	23,8%	23,8%	E1				
French American Banking Corp	USA								S1
FSI Holdings Inc	USA	Full	100,0%	100,0%		Full	100,0%	100,0%	
Via North America Inc	USA				S4	Full	100,0%	100,0%	
Structured Entities									
BNPP EQD Brazil Fund Fundo de Investmento Multimercado	Brazil	Full	-	-		Full	-	-	
BNPP Proprietario Fundo de Investimento Multimercado	Brazil	Full	-	-		Full	-	-	
BNPP VPG Adonis LLC	USA	Full	-	-		Full	-	-	
BNPP VPG Brookfin LLC	USA	Full	-	-		Full	-	-	
BNPP VPG Brookline Cre LLC	USA	Full	-	-		Full	-	-	
BNPP VPG CT Holdings LLC	USA	Full	-	-		Full	-	-	
BNPP VPG EDMC Holdings LLC	USA	Full	-	-		Full	-	-	
BNPP VPG Express LLC	USA	Full	-	-		Full	-	-	
BNPP VPG Freedom Communications LLC	USA				S1	Full	-	-	
BNPP VPG Legacy Cabinets LLC	USA				S1	Full	-	-	
BNPP VPG Mark IV LLC	USA				S1	Full	-	-	
BNPP VPG Master LLC	USA	Full	-	-		Full	-	-	
BNPP VPG Medianews Group LLC	USA				S1	Full	-	-	
BNPP VPG Northstar LLC	USA				S1	Full	-	-	
BNPP VPG Pacex LLC	USA				S1	Full	-	-	
BNPP VPG PCMC LLC	USA				S1	Full	-	-	
BNPP VPG SBX Holdings LLC	USA				S1	Full	-	-	
BNPP VPG SDI Media Holdings LLC	USA								S1
Decart Re Ltd	Bermuda	Full (2)	-	-	E1				
Ozcar Multi Strategies LLC	USA								S3
Starbird Funding Corp	USA	Full	-	-		Full	-	-	
VPG SDI Media LLC	USA								S1
CIB Pacific Asia									
Bank BNPP Indonesia PT	Indonesia	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNP Pacific Australia Ltd	Australia				S3	Full	100,0%	100,0%	
BNPP Amber Holdings Pty Ltd	Australia	Full	100,0%	100,0%		Full	100,0%	100,0%	E1
BNPP Arbitrage Hong Kong Ltd	Hong Kong	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP China Ltd	China	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Commodities Trading Shanghai Co Ltd	China	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Finance Hong Kong Ltd	Hong Kong	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP India Holding Private Ltd	India	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP India Solutions Private Ltd	India	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Malaysia Berhad	Malaysia	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Securities Asia Ltd	Hong Kong	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Securities India Private Ltd	India	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Securities Japan Ltd	Japan	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Securities Korea Co Ltd	Rep. of Korea	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Securities Singapore Pte Ltd	Singapore	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Securities Taiwan Co Ltd	Taiwan	Full	100,0%	100,0%		Full	100,0%	100,0%	

Name	Country	31 December 2018				31 December 2017			
		Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNPP Sekuritas Indonesia PT	Indonesia	Full	99,0%	99,0%		Full	99,0%	99,0%	
BNPP SJ Ltd	Hong Kong								S3
BNPP SJ Ltd (Japan branch)	Japan								S3
BPP Holdings Pte Ltd	Singapore	Full	100,0%	100,0%		Full	100,0%	100,0%	
Other Business Units									
BNPP Suisse SA	Switzerland	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Suisse SA (Guernsey branch)	Guernsey	Full	100,0%	100,0%		Full	100,0%	100,0%	
Property companies (property used in operations) and others									
Antin Participation 5	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
BNPP Home Loan SFH	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP Partners for Innovation	France	Equity	50,0%	50,0%		Equity	50,0%	50,0%	
BNPP Procurement Tech	France	Full	100,0%	100,0%	E1				
BNPP Public Sector SCF	France	Full (1)	100,0%	100,0%		Full (1)	100,0%	100,0%	
BNPP SB Re	Luxembourg	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Cobema	Belgium				S4	Full	100,0%	100,0%	
Compagnie Financière Ottomane SA	Luxembourg	Full	97,3%	97,2%		Full	97,3%	97,2%	V1
Ejesur SA	Spain	Full	100,0%	100,0%	E1				
GIE Groupement Auxiliaire de Moyens	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
GIE Groupement d'Etudes et de Prestations	France	Full	100,0%	100,0%	E1				
Le Sphinx Assurances Luxembourg SA	Luxembourg	Full (2)	100,0%	100,0%		Full (2)	100,0%	100,0%	
Lion International Investments SA	Luxembourg	Full	100,0%	100,0%		Full	100,0%	100,0%	
Plagefin SA	Luxembourg	Full	100,0%	65,9%		Full	100,0%	65,9%	
Sagip	Belgium	Full	100,0%	100,0%		Full	100,0%	100,0%	
Société Immobilière du Marché Saint-Honoré	France				S2	Full	100,0%	100,0%	V1
Société Orbaisienne de Participations	France	Full	100,0%	100,0%		Full	100,0%	100,0%	
Structured Entities									
BNPP B Institutional II	Belgium	Full	-	-		Full	-	-	
Euro Secured Notes Issuer (Ex- BNPP SME-1)	France	Full	-	-		Full	-	-	
FCT Laffitte 2016	France	Full	-	-		Full	-	-	
FCT Opéra 2014	France	Full	-	-		Full	-	-	

(a) At 31 December 2018, the securitisation fund Ecarat UK includes 4 funds (Ecarat PLC 6 to 9), versus 5 funds (Ecarat PLC 4 to 8) at 31 December 2017
(b) At 31 December 2018, the securitisation funds UCI and Prado include 14 funds (FCC UCI 9 to 12, 14 to 17 and RMBS Prado I to VI), versus 14 fonds at 31 December 2017 (FCC UCI 9 to 12, 14 to 18 and RMBS Prado I to V)
(c) At 31 December 2018 and at 31 December 2017, the securitisation fund Autonoria includes 1 silo (Autonoria 2014)
(d) At 31 December 2018, the securitisation funds Domos comprise these funds : Domos 2011 and Domos 2017, versus Domos 2008, Domos 2011 and Domos 2017 at 31 December 2017
(e) At 31 December 2018, 95 Construction-sale companies (77 Full and 18 Equity) versus 96 at 31 December 2017 (81 Full and 15 Equity)

As requested by the ANC 2016 regulation, the list of entities that are controlled by the Group, jointly controlled or under significant influence, but excluded from the scope of consolidation since their contribution to the consolidated financial statements would be immaterial to the Group, and the list of equity investments, are available on the "Regulated Information" page of the https://invest.bnpparibas.com website.

Changes in the scope of consolidation

New entries (E) in the scope of consolidation
E1 Passing qualifying thresholds
E2 Incorporation
E3 Purchase, gain of control or significant influence
Removals (S) from the scope of consolidation
S1 Cessation of activity (dissolution, liquidation, ...)
S2 Disposal, loss of control or loss of significant influence
S3 Passing qualifying thresholds
S4 Merger, Universal transfer of assets and liabilities
Variance (V) in voting or ownership interest
V1 Additional purchase
V2 Partial disposal
V3 Dilution
V4 Increase in %

Equity * Controlled but non material entities consolidated under the equity method as associates
FV Joint control or investment in associates measured at Fair Value through P&L

Miscellaneous
D1 Consolidation method change not related to fluctuation in voting or ownership interest

Prudential scope of consolidation

(1) French subsidiaries whose supervision of prudential requirements is complied with through the supervision on a consolidated basis of BNP Paribas SA, in accordance with article 7.1 of Regulation n°575/2013 of the European Parliament and of the Council
(2) Insurance entities consolidated under the equity method in the prudential scope
(3) Jointly controlled entities under proportional consolidation in the prudential scope
(4) Collective investment undertaking excluded from the prudential scope.

8.k Fees paid to the statutory auditors

Year to 31 Dec. 2018	Deloitte		PricewaterhouseCoopers		Mazars		TOTAL	
Excluding tax, in thousands of euros	Total	%	Total	%	Total	%	Total	%
Statutory audits and contractual audits, including	15,289	75%	15,712	61%	12,104	90%	43,105	73%
- Issuer	3,899		4,462		2,515		10,876	
- Consolidated subsidiaries	11,390		11,250		9,589		32,229	
Services other than those required for their statutory audit engagement, including	5,108	25%	9,898	39%	1,326	10%	16,332	27%
- Issuer	1,526		3,175		712		5,413	
- Consolidated subsidiaries	3,582		6,723		614		10,919	
TOTAL	**20,397**	**100%**	**25,610**	**100%**	**13,430**	**100%**	**59,437**	**100%**
of which fees paid to statutory auditors in France for the statutory audit and contractual audit	*4,318*		*4,477*		*4,936*		*13,731*	
of which fees paid to statutory auditors in France for services other than those required for their statutory audit engagements	*398*		*2,091*		*609*		*3,098*	

Year to 31 Dec. 2017	Deloitte		PricewaterhouseCoopers		Mazars		TOTAL	
Excluding tax, in thousands of euros	Total	%	Total	%	Total	%	Total	%
Statutory audits and contractual audits, including	16,683	68%	16,667	64%	11,261	92%	44,611	71%
- Issuer	3,840		4,730		2,448		11,018	
- Consolidated subsidiaries	12,843		11,937		8,813		33,593	
Services other than those required for their statutory audit engagement, including	7,906	32%	9,513	36%	935	8%	18,354	29%
- Issuer	3,534		2,622		535		6,691	
- Consolidated subsidiaries	4,372		6,891		400		11,663	
TOTAL	**24,589**	**100%**	**26,180**	**100%**	**12,196**	**100%**	**62,965**	**100%**
of which fees paid to statutory auditors in France for the statutory audit and contractual audit	*5,883*		*4,623*		*4,730*		*15,236*	
of which fees paid to statutory auditors in France for services other than those required for their statutory audit engagements	*987*		*1,388*		*549*		*2,924*	

The audit fees paid to auditors which are not members of the network of one of the auditors certifying the consolidated financial statements and the non-consolidated financial statements of BNP Paribas SA, mentioned in the table above, amount to EUR 507 thousand for the year 2018 (EUR 909 thousand in 2017).

Services other than those required for the statutory audit engagement are mainly composed this year of reviews of the entity's compliance with regulatory requirements, and reviews of internal control quality by comparison with international standards (such as ISAE 3402) as part of services provided to customers, particularly in the Securities and Asset Management businesses, and expertise on the Bank's transformation projects.

APPENDIX 6 —
EXTRACT OF THE INTERIM FINANCIAL STATEMENTS OF THE ISSUER FOR THE SIX-MONTH PERIOD ENDED 30 JUNE 2018

The information set out in this Appendix 6 has been extracted from our interim financial statements for the six-month period ended 30 June 2018. References to page numbers on the following pages are to the page numbers of our interim financial statements.

Our interim financial statements have been prepared in accordance with our usual accounting policies and procedures.

Interim financial statements
for the six months period ended 30 June 2018

BNP Paribas Issuance B.V.

Herengracht 595
1017 CE Amsterdam
The Netherlands
Chamber of Commerce Amsterdam No. 33215278

MANAGEMENT BOARD REPORT

Description and principal activity of the Company
BNP Paribas Issuance B.V. (the Company) was incorporated on 10 November 1989 under the law of the Netherlands. On 24 May 2017 the articles of association have been updated and the name of the Company has changed from BNP Paribas Arbitrage Issuance B.V. to BNP Paribas Issuance B.V.

The principal objectives of the Company are to issue securities, such as warrants, certificates, private placements, notes, to enter into related OTC agreements and to issue and acquire financial instruments of any nature for account of various entities of the BNP Paribas group.

Audit committee
The Company qualifies as an organisation of public interest pursuant to Dutch and EU law. By making use of the exemption for groups the Company did not install an audit committee. The Company belongs to the BNP Paribas group which has an audit committee that complies with international corporate governance rules.

Operating result
The net profit for the period was EUR 12,238 (the six months' period ended 30 June 2017 profit EUR 11,053).

Liquidity and shareholder's equity
No significant changes to liquidity resources occurred. Equity increased with the result for the period. Liquidity and capital resources are considered sufficient given the objective and activities of the Company.

Financial risk management
Market risk
The Company takes on exposure to market risks arising from positions in interest rates, currency exchange rates, commodities and equity products, all of which are exposed to general and specific market movements. However, these risks are hedged by swap agreements with BNP Paribas group entities and OTC option agreements or collateral arrangements and therefore these risks are mitigated in principle.

Credit risk
The Company has significant concentration of credit risks as all OTC contracts are acquired from its parent companies and other group companies. Taking into consideration the objective and activities of the Company and the fact that the BNP Paribas group is under supervision of the European Central Bank and the *Autorité de controle prudentiel et de résolution*, Paris, management considers these risks as acceptable. The long term senior debt of BNP Paribas is rated (A) by Standard & Poor's and (A1) by Moody's.

Liquidity risk
The Company has significant liquidity risk exposure. To mitigate this exposure, the Company entered into netting agreements with its parent company and other group companies.

Employees
The Company employs no personnel.

Future outlook
It is expected that the activities of the Company in the second half of 2018 will remain on the same level as in the first half of 2018.

Statement
To the best of our knowledge we declare that:
1. The interim financial statements at 30 June 2018 give a fair view of the assets, the financial position and the profit of the Company; and
2. The interim financial report at 30 June 2018 gives a fair view of the Company's condition on balance sheet date, the development of the Company during the financial period ended 30 June 2018 and all material risks to which the Company is exposed.

Amsterdam, 23 August 2018
The Management Board,

Signed by
BNP Paribas Finance B.V.

BALANCE SHEET AT 30 JUNE 2018
(before appropriation of the net result)

	Notes	30.06.2018	31.12.2017
		EUR	EUR
ASSETS			
Financial fixed assets	1		
Repurchase agreements		269,830,000	269,830,000
OTC contracts		43,276,218,872	38,528,016,122
		43,546,048,872	38,797,846,122
Current assets			
OTC contracts	1	14,395,293,713	12,039,475,865
Taxes receivable		57,319	9,901
Accounts receivable group		2,086,200	1,596,379
Cash at banks		77,349	218,633
		14,397,514,581	12,041,300,778
TOTAL ASSETS		**57,943,563,453**	**50,839,146,900**
SHAREHOLDER'S EQUITY AND LIABILITIES			
Shareholder's equity	2		
Share capital issued and paid up		45,379	45,379
Retained earnings		469,860	442,920
Result for the period		12,238	26,940
		527,477	515,239
Long term liabilities			
Issued securities	3	43,546,048,872	38,797,846,122
Current liabilities			
Issued securities	3	14,395,293,713	12,039,475,865
Other liabilities – non group		7,490	637,362
– group		1,685,901	672,312
		14,396,987,104	12,040,785,539
TOTAL EQUITY AND LIABILITIES		**57,943,563,453**	**50,839,146,900**

PROFIT AND LOSS ACCOUNT FOR THE PERIOD ENDED 30 JUNE 2018

	Notes	Period 1.1 to 30.6.2018 EUR	Period 1.1 to 30.6.2017 EUR
Net result financial instruments	4	0	0
Fee income and other income	5	193,729	180,264
Operating income		193,729	180,264
Operating expenses			
General and administrative expenses		-175,717	-163,877
		18,012	16,387
Operating result			
Interest income		0	0
Bank costs and similar charges		-1,696	-1,650
Profit before taxation		16,316	14,737
Corporate income tax	6	-4,078	-3,684
Profit after taxation		**12,238**	**11,053**

CASH FLOW STATEMENT FOR THE PERIOD ENDED 30 JUNE 2018

	Period 1.1 to 30.6.2018	Period 1.1 to 30.6.2017
	EUR	EUR
Cash flow from operating activities		
Issuing of securities against OTC coverage	0	0
Received reimbursed issuing expenses	3,011,049	2,272,157
Received reimbursed general expenses	327,800	100,691
Paid issuing expenses	(3,514,369)	(2,757,506)
Paid general expenses	(32,449)	(42,291)
Received taxes	66,685	116,928
Cash flow from operating activities	(141,284)	(310,021)
Cash flow from financing activities	0	0
Cash flow from investing activities	0	0
Increase/ (decrease) cash at banks	(141,284)	(310,021)
Movements in cash at banks		
Cash at banks at January 1	218,633	352,062
Increase / (decrease)	(141,284)	(310,021)
Cash at banks	77,349	42,041

Refer to page 11 for the principles for preparation of the cash flow statement.

SHAREHOLDER'S EQUITY AT 30 JUNE 2018

	30.06.2018	31.12.2017
	EUR	EUR
Shareholder's equity		
Share capital issued and paid up	45,379	45,379
Retained earnings	469,860	442,920
Result for the period	12,238	26,940
TOTAL SHAREHOLDER'S EQUITY	**527,477**	**515,239**

NOTES TO THE FINANCIAL STATEMENTS

GENERAL

BNP Paribas Arbitrage Issuance B.V. (the Company), having its registered address at Amsterdam, was incorporated under the law of the Netherlands on 10 November 1989 as a private limited liability company. On 24 May 2017 the name of the Company changed from BNP Paribas Arbitrage Issuance B.V. to BNP Paribas Issuance B.V.

The principal objectives of the Company are to issue securities, such as warrants, certificates, private placements, notes, to enter into related OTC agreements and to issue and acquire financial instruments of any nature for account of various entities of the BNP Paribas group.

All outstanding shares of the Company are owned by BNP Paribas S.A., Paris, France, which company consolidates the figures of the Company. The financial statements of BNP Paribas S.A. can be found on the website group.bnpparibas.com.

SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation
The interim financial statements of the Company are prepared in accordance with accounting principles generally accepted in the Netherlands and in conformity with the Dutch Guideline for Annual Reporting 394 on Interim Reports. All amounts are stated in euros, the reporting currency, unless stated otherwise.

The accounting principles of the Company are summarised below. These accounting principles have all been applied consistently throughout the financial year and the preceding year unless indicated otherwise.

Accounting convention
The interim financial statements are prepared under the historical cost convention, except for derivatives that are measured at fair value with changes through profit and loss.

Going concern basis of accounting
The interim financial statements have been prepared on a going concern basis. The Company has a master hedging agreement with BNP Paribas group entities under which all issued securities are hedged by swap agreements and OTC option agreements or collateral arrangements. In addition, the Company has an agreement with BNP Paribas group entities to recharge its operating expenses with a margin of 10%.

Use of estimates and judgements
The preparation of the interim financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Information about critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the interim financial statements is included in note 3.

Recognition of income and expenses
The net result financial instruments includes capital gains and losses, currency results, interest income and expense and changes in fair value on the issued securities and related OTC contracts. As the Company enters into a swap agreement with a BNP Paribas group company and an OTC option at exactly the same terms and conditions of the issued security or a collateral arrangement at each issue of securities, there is a complete hedge of the economic risk of the Company. Therefore, the net result on the derivatives equals zero and is recorded on a net basis.

Fee income, other income and general and administrative expenses are taken in the year to which they relate. Profits are recognised in the year they are realised; losses are taken as soon as they are foreseeable.

If securities are exercised against the Company, the Company fulfils its obligation by exercising the related swap agreements or OTC contracts with entities of the BNP Paribas group as the case may be. Issued securities and related swap agreements and OTC contracts are released simultaneously. Issued securities not exercised at maturity and the related swap agreements and OTC contracts are released without any further future obligation for the Company.

Valuation of assets and liabilities - general
Unless indicated otherwise, assets and liabilities are stated at amortised cost.

Financial instruments
Financial instruments include accounts receivable and accounts payable, cash at banks and cash equivalents, issued securities and acquired OTC contracts.

Financial assets and liabilities are recognised on the Company’s balance sheet when the Company becomes a party to the contractual provisions of the instrument. Financial assets and liabilities are derecognised when those contractual provisions are expired or transferred.

Non-derivative financial instruments are measured and accounted for at fair value upon initial recognition and subsequently at amortised cost.

Derivatives (Issued securities and OTC’s)
Derivatives are measured and accounted for at fair value upon initial recognition and at subsequent dates. Gains and losses are directly recognised in profit and loss. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market or most advantageous market, at the measurement date. Reference is made to note 3 for details about the determination of fair values.

The fair values of OTC contracts are calculated in the same way as their related issued securities.

The Company does not apply hedge accounting.

Currencies
The functional currency of the Company is the euro.

Balance sheet items denominated in currencies other than the euro are translated at the rate of exchange prevailing on balance sheet date. Transactions in foreign currencies (not concerning derivatives) during the reporting period have been incorporated at the rate of settlement.

The premiums of the issued securities and the cost of the related OTC contracts are denominated in different currencies. Moreover, the underlying contracts of the securities have their own currency denominations, which are often based on a basket of currencies. The net effect of the currency risk is nil though, as this risk is completely hedged.

Corporate income tax
Tax on result is calculated by applying the rates for the financial year to the result in the profit and loss account.

PRINCIPLES FOR PREPARATION OF THE CASH FLOW STATEMENT

The cash flow statement is prepared according to the direct method and consists of cash only; paid interest is taken into account under paid general expenses.

Netting agreements between the Company and entities of the BNP Paribas group have been drawn up for all flows resulting from securities and OTC contracts to avoid that payments have to be made for these flows. The outcome of this procedure is reflected in the cash flow report under the heading “Issuing of securities against OTC coverage”.

FINANCIAL RISK MANAGEMENT

Market risk
The Company takes on exposure to market risks arising from positions in interest rates, currency exchange rates, commodities and equity products, all of which are exposed to general and specific market movements. However, all issued securities are hedged by swap agreements with BNP Paribas group entities and OTC option agreements or collateral arrangements and therefore these risks are mitigated in principle.

Credit risk
The Company has a significant concentration of credit risks as all OTC contracts are acquired from its parent company and other group companies. Taking into consideration the objective and activities of the Company and the fact that BNP Paribas group is under supervision of the European Central Bank and the *Autorité de controle prudentiel et de résolution*, Paris, management considers these risks as acceptable. The long term senior debt of BNP Paribas is rated (A) by Standard & Poor’s and (A1) by Moody’s.

Liquidity risk
The Company has significant liquidity risk exposure. To mitigate this exposure, the Company entered into netting agreements with its parent company and other group companies.

RELATED PARTY TRANSACTIONS

The Company has entered into various agreements with its parent company and other group companies relating to the issuing of securities, the hedging of the related exposures and the reimbursement of costs. Taking into account the position of the Company within the group these agreements are at arms-length and have as objective to limit cash flow, credit and market risks.

NOTES TO THE BALANCE SHEET

1. Financial fixed assets
For all most all issued securities OTC contracts with BNP Paribas group companies are agreed having the same characteristics as the issued securities. This means that the underlying quantity, issue price, strike, parity, maturity and quoted price for exercise are identical. Concerning one issued security the Company entered into repurchase agreements with BNP Paribas.
Refer to note 3 for the details of the issued securities and hence the OTC contracts.

2. Shareholder's equity
Share capital:
The Company's issued share capital amounts to 45,379 shares with a nominal value of EUR 1 each, which are fully paid-up.

During the financial year under review, there have been no changes in the issued or paid up capital. The authorised capital has been annulled pursuant to a change of the articles of association.

Retained earnings:
The movement is as follows:

	EUR	EUR
	30.06.2018	31.12.2017
Opening balance	442,920	419,613
Appropriation result previous year	26,940	23,307
Closing balance	469,860	442,920

3. Issued securities
The Company establishes securities programmes and issues securities such as warrants, notes and certificates exercisable pursuant to the terms and conditions of such securities programmes. Entities of the BNP Paribas group have agreed to purchase the securities at the same time. The entities of the BNP Paribas group distribute the securities to third parties. BNP Paribas S.A. acts as guarantor for the securities programmes towards the third parties.

The issued securities and related OTC contracts can be specified as follows:

	Fair value 30.06.2018	Fair value 31.12.2017
	EUR	EUR
- Up to 1 year	14,395,293,713	12,039,475,865
- From 1- 5 years	26,049,025,530	23,824,600,113
- Exceeding 5 years	17,497,023,342	14,973,246,009
Financial fixed assets	43,546,048,872	38,797,846,122
Total	57,941,342,585	50.837,321,987

Specification (fair value) based on method of valuation

30.06.2018	Level 1	Level 2	Level 3	Total
	EUR	EUR	EUR	EUR
Warrants				
underlying shares	0	915,932,899	1,002,811,739	1,918,744,638
underlying indices	0	1,097,363,486	924,623,836	2,021,987,322
underlying currencies	0	12,965,515	3,280,301	16,245,816
underlying commodities	0	12,285,991	0	12,285,991
underlying funds	0	229,468,280	879,644,965	1,109,113,245
underlying credits	0	8,966,467	0	8,966,467
underlying interest rates	0	16,540,619	0	16,540,619
	0	2,293,523,257	2,810,360,841	5,103,884,098
Certificates				
underlying shares	0	4,839,753,547	1,163,318,065	6,003,071,612
underlying indices	0	20,417,428,823	8,087,611,451	28,505,040,274
underlying currencies	0	257,779,115	62,317,317	320,096,432
underlying commodities	0	802,386,766	47,220,650	849,607,416
underlying funds	0	54,230,406	580,489,946	634,720,352
underlying credits	0	3,741,461,958	0	3,741,461,958
underlying interest rates	0	809,714,270	0	809,714,270
	0	30,922,754,885	9,940,957,429	40,863,712,314
MTN's				
underlying shares	0	739,004,329	481,071,929	1,220,076,258
underlying indices	0	4,006,134,714	4,094,309,680	8,100,444,394
underlying currencies	0	141,644,373	0	141,644,373
underlying credits	0	1,990,512,159	0	1,990,512,159
underlying funds	0	0	20,698,950	20,698,950
underlying interest rates	0	500,370,039	0	500,370,039
	0	7,377,665,614	4,596,080,559	11,973,746,173
Total per 30 June 2018	0	40,593,943,756	17,347,398,829	57,941,342,585

2017	**Level 1** EUR	**Level 2** EUR	**Level 3** EUR	**Total** EUR
Warrants				
underlying shares	0	1,821,556,239	1,137,304,766	2,958,861,005
underlying indices	0	883,548,257	795,698,880	1,679,247,137
underlying currencies	0	10,048,222	3,464,492	13,512,714
underlying commodities	0	8,122,286	439,504	8,561,790
underlying funds	0	185,445,173	534,151,367	719,596,540
underlying credits	0	13,366,750	0	13,366,750
underlying interest rates	0	1,753,816	0	1,753,816
	0	2,923,840,743	2,471,059,009	5,394,899,752
Certificates				
underlying shares	0	5,329,067,181	832,035,643	6,161,102,824
underlying indices	0	18,491,809,952	7,584,417,187	26,076,227,139
underlying currencies	0	175,055,986	14,996,532	190,052,518
underlying commodities	0	588,816,141	45,082,820	633,898,961
underlying funds	0	48,963,944	446,251,881	495,215,825
underlying credits	0	3,277,512,956	0	3,277,512,956
underlying interest rates	0	703,361,002	0	703,361,002
	0	28,614,587,162	8,922,784,063	37,537,371,225
MTN’s				
underlying shares	0	620,524,943	309,522,149	930,047,092
underlying indices	0	3,708,755,056	1,979,424,209	5,688,179,265
underlying currencies	0	90,628,082	0	90,628,082
underlying credits	0	668,040,197	0	668,040,197
underlying interest rates	0	528,156,374	0	528,156,374
	0	5,616,104,652	2,288,946,358	7,905,051,010
Total per 31 December 2017	0	37,154,532,557	13,682,789,430	50,837,321,987

BNP Paribas group including the Company determines the fair value of financial instruments either by using prices obtained directly from external data or by using valuation techniques. These valuation techniques are primarily market and income approaches encompassing generally accepted models (e.g. discounted cash flows, Black-Scholes model and interpolation techniques). They maximize the use of observable inputs and minimize the use of unobservable inputs. They are calibrated to reflect current market conditions and valuation adjustments are applied as appropriate, when some factors such as model, liquidity and credit risks are not captured by the models or their underlying inputs but are nevertheless considered by market participants when setting the exit price.

The unit of measurement is generally the individual financial asset or financial liability but a portfolio-based measurement can be elected subject to certain conditions. Accordingly, the group retains this portfolio based measurement exception to determine the fair value when some group of financial assets and financial liabilities with substantially similar and offsetting market risks or credit risks are managed on the basis of a net exposure, in accordance with the documented risk management strategy.

Assets and liabilities measured or disclosed at fair value are categorised into the three following levels of the fair value hierarchy:

Level 1: fair values are determined using directly quoted prices in active markets for identical assets and liabilities. Characteristics of an active market include the existence of a sufficient frequency and volume of activity and of readily available prices.

Level 2: fair values are determined based on valuation techniques for which significant inputs are observable market data, either directly or indirectly. These techniques are regularly calibrated and the inputs are corroborated with information from active markets.

Level 3: fair values are determined using valuation techniques for which significant inputs are unobservable or cannot be corroborated by market-based observations, due for instance to illiquidity of the instrument and significant model risk. An unobservable input is a parameter for which there are no market data available and that is therefore derived from proprietary assumptions about what other market participants would consider when assessing fair value. The assessment of whether a product is illiquid or subject to significant model risks is a matter of judgment.

The level in the fair value hierarchy within which the asset or liability is categorised in its entirety is based upon the lowest level input that is significant to the entire fair value. All given estimated fair values are related to the market conditions prevailing at the end of the reporting period; the future values may differ.

When issued, securities are publicly offered or privately placed. Sometimes privately placed securities are listed for the secondary market. Listed securities are listed on stock exchanges in- and outside of the European Union; the related OTC contracts are not listed. The majority of the issued securities are not traded actively in active markets.

No accrued interest is presented in the balance sheet because the accrued interest is part of the market value of the derivatives as disclosed in the balance sheet. The net result on the derivatives equals zero and is recorded on a net basis in the profit and loss account, see note 4.

Conditions that can influence the future cash flow

In general it is assumed that the securities and the related OTC contracts are exercised at the exercise dates mentioned in the final terms of the securities against the fair value as determined. Based on these two assumptions the above specification based on maturity has been prepared. Netting agreements between the Company and entities of the BNP Paribas group have been drawn up for all flows resulting from securities and OTC contracts to avoid that payments have to be made for these flows. Conditions that could influence future cash flows will have therefore no impact on the cash flow of the Company.

NOTES TO THE PROFIT & LOSS ACCOUNT

4. Net result financial instruments

The net result derivatives includes capital gains and losses, currency results, interest income and expense and changes in fair value on the issued securities and related swap agreements and OTC contracts. As the Company enters into an OTC option or swap agreement with a BNP Paribas group company at each issue of securities at exactly the same terms and conditions of the issued security, there is a complete hedge of the economic risk of the Company. Therefore, the net result on the derivatives equals zero and is recorded on a net basis.

5. Fee income and other income

Other income concerns recharged general and administrative expenses of the Company increased with an up-count of 10%, based on cost plus agreements concluded for an indefinite period of time. These costs have been or will be invoiced to BNP Paribas group companies.

6. Corporate income tax

The corporate income tax is the estimated charge for the period amounting to EUR 4,078. The rate for the financial year 2018 and the effective rate for the period are 25%.
BNP Paribas Issuance B.V. has entered into a consolidated tax group (fiscale eenheid) for Dutch corporate income tax purposes with other BNP Paribas Group entities domiciled in the Netherlands effective as of 1 January 2015. As from 1st January 2017 BNP Paribas SA-Netherlands Branch acts as parent of this consolidated tax group. As a consequence the Company can be held liable for the corporate income tax due by the consolidated tax group.

Issuing expenses and remunerations
Issuing expenses are expenses related to the issuing of the securities for account of the Company and are reimbursed by BNP Paribas group companies, if charged to the Company.

The sole member of the Management Board will charge a management fee of EUR 32,250 over the reporting period (over the first six months of 2017: EUR 29,563).

Mazars Accountants N.V. will charge a fee of EUR 8,000 for the financial half-year 2018 as audit fee (2017: EUR 8,000). No additional amount has been charged to the Company during the reporting period for audit-related fees.

Commitments, contingencies and off-balance items
The Company has issued securities with pledged collateral. The value of the pledged collateral amounts to EUR 1,461,237,656 (31.12.2017: EUR 1,645,398,306).

Employees
The Company employs no personnel.

Subsequent events
No subsequent events have occurred.

Amsterdam, 23 August 2018
The Management Board,

Signed by
BNP Paribas Finance B.V.

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