CONSOLIDATED FINANCIAL STATEMENTS

Year ended 31 December 2018

Unaudited figures

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 increase (decrease) in cash related to transactions with customers and credit institutions		(1,104)	5,771
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	5.e	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	5.e	8,813	8,063
On demand loans from credit institutions	5.g	(10,431)	(9,906)
Deduction of receivables and accrued interest on cash and equivalents		361	(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	(78.00)	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 effective 1 January 2018 did not have an effect on the half-year condensed financial statements as of 30 June 2018.

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.

(2) 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 shareholders' 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 “Income on available-for-sale financial assets and other financial assets not measured at fair value”.

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” includes debt securities, with fixed maturity, that the group intends 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 “Income on available-for-sale financial assets and other financial assets not measured at fair value”. 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 “Income on available-for-sale financial assets and other financial assets not measured at fair value”. 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 recognized 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*	Reclassification of financial instruments of insurance	Re-labelling of financial instruments items	Other reclassifications	Effects of securities transactions previously	31 December 2017 *IAS 39 revised*
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 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 *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 *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			Impacts of the IFRS 15 adoption	1 January 2018 *IFRS 9 et IFRS 15*
		Reclassifications	Remeasurements			
			Phase 1	Phase 2		
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 attribuable 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).

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 & IFRS 15*
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

3. NOTES TO THE PROFIT AND LOSS ACCOUNT FOR 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.

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 investment income / (expense)	(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 investment income / (expense)	**(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 will be 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 advances 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		
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.

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*		1 January 2018 *IFRS 9 & IFRS 15*	
	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.

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*				1 January 2018 *IFRS 9 & IFRS 15*			
	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	5,165,310	15,909,173	1,398,333	9,348,490	4,913,384	15,660,207
Foreign exchange derivatives	15,547	52,329	4,781,470	4,849,346	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**	**11,180,332**	**23,595,900**	**2,342,427**	**9,712,387**	**10,772,361**	**22,827,175**

5.b DERIVATIVES USED FOR HEDGING PURPOSES

In millions of euros	31 December 2018 IFRS 9 & IFRS 15		1 January 2018 IFRS 9 & IFRS 15	
	Positive fair value	Negative fair value	Positive fair value	Negative fair value
Fair value hedges	**8,079**	**10,706**	**11,632**	**14,542**
Interest rate derivatives	7,871	10,526	11,454	14,311
Foreign exchange derivatives	208	180	178	231
Cash flow hedges	**1,683**	**964**	**2,081**	**1,101**
Interest rate derivatives	1,233	358	1,551	449
Foreign exchange derivatives	439	496	472	646
Other derivatives	11	110	58	6
Net foreign investment hedges	**48**	**7**	**8**	**39**
Foreign exchange derivatives	48	7	8	39
Derivatives used for hedging purposes	**9,810**	**11,677**	**13,721**	**15,682**

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	590	561	1,151
Attributable to minority interests	5	15	20	(5)	2	(3)

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 Level 1	Level 2	Level 3	Total	Negative market value 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 Level 1	Level 2	Level 3	Total	Negative market value 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:

	Financial assets				Financial liabilities		
In millions of euros	Financial instruments at fair value through profit or loss held for trading	Financial instruments at fair value through profit or loss not held for trading	Financial assets at fair value through equity	TOTAL	Financial instruments at fair value through profit or loss held for trading	Financial instruments designated as at fair value through profit or loss	TOTAL
At 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 amont	Gross Value	Impairment (note 3.h)	Carrying amont
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 Gross Value	Impairment (note 3.h)	Carrying amount	1 January 2018 IFRS 9 & IFRS 15 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	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	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**
AVAILABLE-FOR-SALE FINANCIAL ASSETS AND FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS	**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.

- **Details 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	**105,974**	**6,068**	**112,042**	**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
Derivatives 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.

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:

In millions of euros	Year to 31 Dec. 2018			31 December 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017			1 January 2018 *IFRS 9 & IFRS 15*
	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.f 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 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2018 *IFRS 9 & IFRS 15*	Year to 31 Dec. 2017 *IFRS 9 & IFRS 15*
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 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 reimburse-ment 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 reimburse-ment 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 reimburse-ment 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 reimburse-ment 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 September 2015 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

- **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 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, will be 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 Dec. 2018	Year to 31 Dec. 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.f OTHER RELATED PARTIES

Other related parties of the BNP Paribas Group comprise consolidated companies (including entities consolidated under the equity method) and entities managing post-employment benefit plans offered to Group employees (except for multi-employer and multi-industry schemes).

Transactions between the BNP Paribas Group and related parties are carried out on an arm's length basis.

RELATIONS BETWEEN CONSOLIDATED COMPANIES

A list of companies consolidated by the BNP Paribas Group is provided in note 8.j "Scope of consolidation". Transactions and outstanding balances between fully-consolidated entities are eliminated. The tables below show transactions with entities accounted for under the equity method.

- **Outstanding balances of related-party transactions:**

In millions of euros	31 December 2018 *IFRS 9 & IFRS 15*		1 January 2018 *IFRS 9 & IFRS 15*	
	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		Year to 31 Dec. 2017 IAS 39	
	Joint ventures	Associates (1)	Joint ventures	Associates (1)
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**

(1) Including controlled but non material entities consolidated under the equity method.

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.g 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.h 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 Republic	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 Republic				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

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
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 Republic	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%	

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
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%	
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 Republic	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%	

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
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%	
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				S3	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 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%	

(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 (including 1 silo Domos 2011-B) and Domos 2017, versus Domos 2008, Domos 2011 (including 2 silos Domos 2011-A and B) and Domos 2017 at 31 December 2017

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
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
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 Republic	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

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
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%	
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 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				
BNPP Actions Entrepreneurs (Ex- Camgestion Euro Mid Cap)	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
EPL	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%	

		31 December 2018				31 December 2017			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
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%	
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 Republic	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%	

Name	Country	31 December 2018 Method	31 December 2018 Voting (%)	31 December 2018 Interest (%)	31 December 2018 Ref.	31 December 2017 Method	31 December 2017 Voting (%)	31 December 2017 Interest (%)	31 December 2017 Ref.
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%	
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	100,0%	100,0%	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	100,0%	100,0%	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%	
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%	

(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)

Name	Country	31 December 2018 Method	Voting (%)	Interest (%)	Ref.	31 December 2017 Method	Voting (%)	Interest (%)	Ref.
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%	
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	-	-	

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.i 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	76%	15,712	63%	12,104	91%	43,105	75%
- 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	4,958	24%	9,408	37%	1,213	9%	15,579	25%
- Issuer	1,526		3,175		599		5,300	
- Consolidated subsidiaries	3,432		6,233		614		10,279	
TOTAL	**20,247**	**100%**	**25,120**	**100%**	**13,317**	**100%**	**58,684**	**100%**
of which fees paid to statutory auditors in France for the statutory audit and contractual audit	*4,318*		*4,477*		*4,876*		*13,671*	
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.