Capital Adequacy Information on BNP Paribas Bank Polska SA capital group

(Pillar 3) as at 31 December 2013

BNP PARIBAS | Bank zmieniającego się świata

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1. Introduction

Under the Banking Law Act (Article 111a Section 1) and its implementing rules banks are required to publish, in a generally accessible manner, qualitative and quantitative information related to bank capital adequacy. Resolution No. 385/2008[1] of the Financial Supervision Authority dated 17 December 2008 specifies rules and methods of publication of qualitative and quantitative information on capital adequacy by banks and the scope of published information.

"Principles regarding public disclosure of information on capital adequacy of BNP Paribas Bank Polska SA'" sets out the scope, frequency, deadline, form and place for disclosing capital adequacy information by BNP Paribas Bank Polska SA.

Pursuant to the obligation specified in Paragraph 2, section 1 of the Resolution No. 385/2008, BNP Paribas Bank Polska SA publicly discloses the information with accordance to the Enclosure 1 and 2 of the Resolution No. 385/2008 on the Group BNP Paribas consolidated data.

Pursuant to the obligation specified in Paragraph 3, section 4 of the Resolution No. 385/2008, BNP Paribas Bank Polska SA publicly discloses the information based on data available at the highest, national level of consolidation.

BNP Paribas considers that its Group Pillar 3 communication fully satisfies disclosure requirements to the Markets. The Group consolidated level is the most accurate one to perform analysis and should prevail to any other sub-consolidated / individual basis.

For more information please refer to the BNP Paribas Group Pillar 3 information, which can be found under part 5 within the 2013 *Registration Document and Annual Financial Report*:

http://media-cms.bnpparibas.com/file/98/1/ddr_2013_bnp_paribas_gb.31981.pdf

The obligations arising from art. 14 of Resolution No. 259/2011 on disclosing information concerning the policy governing variable components of remuneration paid to bank managers are fulfilled through the publishing on the Bank's website of the Information on Variable Compensation Policy for Executives and Other Individuals Who Have a Significant Influence on the Risk Profile at BNP Paribas Bank Polska SA.

2. BNP Paribas Bank Polska SA

The Bank's shares have been listed on the primary market of the Warsaw Stock Exchange since November 7, 1994. Since the year 2004, the Bank's shares have been listed in the continuous trading system.

The BNP Paribas Bank Polska SA Group is a part of BNP Paribas S.A., an international financial institution based in Paris. The direct parent entity of BNP Paribas Bank Polska SA is BNP Paribas Fortis SA/NV (former Fortis Bank SA/NV) based in Brussels which holds 99.89% of the Bank's shares, of which 81.62% directly while 18.27% through Dominet S.A. The remaining 0.11% of shares is held by minority shareholders.

Table 1. Shareholders' structure of BNP Paribas Bank Polska SA as at 31 December 2013.

Balance as at 31.12.2013	Number of shares held	% of the share capital	Number of votes at the AGM*	% number of the total number of votes*
BNP Paribas Fortis SA/NV	23 418 013	81.62%	23 418 013	81.62%
Dominet SA **	5 243 532	18.27%	5 243 532	18.27%
Others	31 381	0.11%	31 381	0.11%
Total:	28 692 926	100.00%	28 692 926	100.00%

* BNP Paribas SA is the parent entity (99.93% shares) of BNP Paribas Fortis Bank SA/NV based in Brussels.

** BNP Paribas Fortis SA/NV based in Brussels is the parent entity (100% shares) of Dominet SA in liquidation.

[1] With further changes introduced by resolutions of the Financial Supervision 326/2011 dated on 20.12.2011 and 259/2011 dated on 4.10.2011.

BNP Paribas Bank Polska SA is the parent entity for:

1. Towarzystwo Funduszy Inwestycyjnych BNP Paribas Polska SA, holding 100% of its shares.
2. Fortis Lease Polska Sp. z o.o., holding 100% of its shares
3. BNP Paribas Factor Sp. z o.o., holding 100% of its shares.

For the needs of this report, BNP Paribas Bank Polska SA Capital Group is defined as a group comprising four entities:
1. BNP Paribas Bank Polska SA
2. Towarzystwo Funduszy Inwestycyjnych BNP Paribas Polska SA
3. Fortis Lease Polska Sp. z o.o.
4. BNP Paribas Factor Sp. z o.o.

2.1. Risk-Weighted Exposure on credit risk (Pillar 1)

According to Annex No. 1 to the Resolution No. 385/2008, § 4, Section 2), the Bank is publishing amounts representing 8% of the risk-weighted exposure, separately for each exposure class:

Table 2. Capital requirements of BNP Paribas Bank Polska SA as at 31st December, 2013.

	Exposure class	Total of capital requirement for following types of risk: credit, counterparty, dilution and late delivery of instruments for settlement [PLN]
Exposures calculated by standardised approach	Governments and central banks	54 032
	Regional government units and local authorities	46
	Administrative bodies and entities that run no business activities	20 581
	Multilateral development banks	0
	International organisations	0
	Banks – Institutions	29 190 880
	Enterprises	386 924 677
	Retail	192 219 867
	Secured on real estate	634 672 086
	Past-due	31 693 930
	Regulatory high risk categories	2 941
	Secured bonds	0
	Short-term exposures towards institutions and entrepreneurs	0
	Exposures on account of participation units in collective investment funds	0
	Other exposures	7 709 711
	Total	**1 282 488 751**

BNP Paribas and BNP Paribas Bank Polska consider the above risk weighted exposures breakdown by exposure class far too detailed, taken into account the size of BNP Paribas Bank Polska SA. The only purpose of such a detailed breakdown is to comply with Annex No. 1 to the Resolution No. 385/2008, chap. 4, Section 2.

For the further information specified in the Annex No 1 to the Resolution No. 385/2008, please see the following sections of the *Annual Consolidated Financial Statements of BNP Paribas Bank Polska SA Group for 2013* at :
http://www.bnpparibas.pl/english/reports/files/2_BNPPL_Consolidated_AnnualReport_2013_ENG.pdf:

- Capital components – Note 21.1. Equity capital,
- Short term capital amount and its main elements – Note 31.7,
- Total capital requirements and capital requirements for particular risks – Note 31.7,
- Capital requirements for operational risk – Note 31.7.

2.2. Methods of Capital Adequacy Assessment (Pillar 2)

Internal capital methodology as presented hereunder is currently converging towards BNP Paribas Group framework embodying risk type definitions and policies. Nevertheless, for 2013 certain quantitative methods are developed mainly locally with assistance of BNP Paribas Group. Risk definitions used by the Bank are aligned with the definitions applied by the BNP Paribas Group.

Liquidity Risk

The Bank recognises that despite the material impact of liquidity risk on the Bank's activity, in practice it is difficult to justify the liquidity risk mitigation by applying a capital buffer. Therefore, the Bank has not allocated any internal capital to liquidity risk.
The management of liquidity risk is currently converging towards BNP Paribas Group framework and policies.

Credit risk

For the needs of the internal capital assessment process, credit risk is measured by applying simplified IRB-Advanced approach. The Bank calculates unexpected losses using this methodology and taking into account the diversification between business lines.

Market risk (interest rate and currency risks) and Interest rate risk in the Banking Book

In the internal capital assessment process the following types of market risks are recognised: interest rate risk in the banking book, interest rate risk in the trading book and currency risk. The market risk is assessed using VaR.
The management of market risk is currently converging towards BNP Paribas Group framework and policies.

Operational risk

For the needs of calculating internal capital needed to cover expected or unexpected losses related to operational risk, the Bank applies a methodology based on the Basic Indicator Approach or BIA which is also applied to calculate Pillar 1 capital requirements.
Under the Bank's assumption, in order to allocate internal capital the indicator shall be computed in line with the approach specified in Resolution No. 324/2011 of the Financial Supervision Authority. In order to calculate an unexpected loss, the Bank shall multiply the capital requirement computed under BIA by the indicator established using an expert approach.
The management of operational risk is currently converging towards BNP Paribas Group framework and policies.

Business, reputation, and strategic risks

The Bank does not calculate internal capital for business, strategic risk, and reputation risk.
The management of business, reputation, and strategic risks is currently converging towards BNP Paribas Group framework and policies

3. Information on BNP Paribas Group

BNP Paribas, Europe's leading provider of banking and financial services, has four domestic markets in retail banking in Europe: Belgium, France, Italy and Luxembourg.
It is present in 75 countries and has almost 185,000 employees, including over 141,000 in Europe.

BNP Paribas holds key positions in its three activities:Retail Banking, Investment Solutions, Corporate and Investment Banking (CIB).
BNP Paribas SA is the parent company of the BNP Paribas Group.

3.1. Consolidation rules of the BNP Paribas Group

3.1.1. The scope of consolidation

The consolidated financial statements of BNP Paribas include all entities under the exclusive or joint control of the BNP Paribas Group or over which the BNP Paribas Group exercises significant influence, with the exception of those entities whose consolidation is regarded as immaterial to the BNP Paribas Group. The consolidation of an entity is regarded as immaterial if its contribution to the consolidated financial statements is below the following three thresholds: EUR 15 million of consolidated revenues, EUR 1 million of consolidated net income before tax, EUR 500 million of total consolidated assets. 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.
The Group also consolidates special purpose entities (SPEs) formed specifically to manage a transaction or a group of transactions with similar characteristics, even where the Group has no equity interest in the entity, provided that the substance of the relationship indicates that the BNP Paribas Group exercises control.

3.1.2. Consolidation methods

Enterprises under the exclusive control of the BNP Paribas Group are fully consolidated. The BNP Paribas Group has exclusive control over an enterprise where it is in a position to govern the financial and operating policies of the enterprise so as to obtain benefits from its activities.
Currently exercisable or convertible potential voting rights are taken into account when determining the percentage of control held.
Jointly-controlled companies are consolidated using the proportional method. The Group exercises joint control when, under a contractual arrangement, strategic financial and operating decisions require the unanimous consent of the parties that share control.
Enterprises over which the BNP Paribas Group exercises significant influence (associates) are accounted for by the equity method. Significant influence is the power to participate in the financial and operating policy decision of an enterprise without exercising control. Significant influence is presumed to exist when the Group holds, directly or indirectly, 20% or more of the voting power of an enterprise. Interests of less than 20% are excluded from consolidation unless they represent a strategic investment and the Group effectively exercises significant influence. Minority interests are presented separately in the consolidated profit and loss account and balance sheet within consolidated equity. The calculation of minority interests takes account the outstanding cumulative preferred shares classified as equity instruments and issued by subsidiaries, when such shares are held outside the Group.

3.1.3. Prudential scope

In accordance with French banking regulation (CRBF Regulation 2000-03 of 6 September 2000), BNP Paribas Group has defined a prudential scope to monitor capital adequacy ratios calculated on consolidated data.
The prudential scope is generally the same as the scope of consolidation, with the exceptions regarding insurance companies, asset disposals and risk transfers (securitisation vehicles that are excluded from the prudential scope).
The full list of consolidated entities is included in annual statement of BNP Paribas Group in Note 8.b.

3.2. Risk management

Risk management is key in the business of banking. At BNP Paribas, operating methods and procedures throughout the organisation are geared towards effectively addressing this matter. The entire process is supervised by the BNP Paribas Group Risk Management Department (GRM), which is responsible for measuring and controlling risks at BNP Paribas

Group level. GRM is independent from the core businesses, business lines and territories and reports directly to BNP Paribas Group Executive Management. The BNP Paribas Group Compliance (GC) function monitors the operational risk under the authority of GRM, which is responsible for all the risk management procedures, and the reputation risk as part of its permanent control responsibilities.

Front-line responsibility for managing risks lies with the divisions and business lines that propose the underlying transactions. GRM continuously performs a second-line control over the Group's credit, market, liquidity and insurance risks. As a part of this role, it must ascertain the soundness and sustainability of the business plans and their overall alignment with the risk profile target set by Executive Management. The risk categories reported by BNP Paribas evolve in line with methodological developments and regulatory requirements. The following risk categories are managed by BNP Paribas: reputation risk, strategy risk, credit and counterparty risk, market risk, operational risk, compliance risk, asset – liability risk, liquidity and refinancing risk, break-even, and concentration risk. All the risk categories discussed above are managed by BNP Paribas. However, no specific capital requirement is identified for reputation and strategy risk as these are risks that may lead to a change in share price which is borne directly by the shareholders and cannot be protected by the Bank's capital.

Reputation risk is thus contingent on other risks and, apart from market rumours leading to a change in share price, its impacts are included in estimated losses incurred for other risk categories.

Strategy risk arising from the strategic decisions published by the Bank, which could give rise to a change in share price, is a matter for the highest level of governance and is the shareholder's responsibility.

Credit risk

Credit risk is the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms. The probability of default and the expected recovery on the loan or receivable in the event of default are key components of the credit quality assessment.

Counterparty risk is the translation of the credit risk embedded in the market, investment and/or payment transactions.

Those transactions include bilateral contracts (i.e. Over-The-Counter – OTC) which potentially expose the Bank to the risk of default of the counterparty faced. The amount of this risk may vary over time in line with market parameters which impact the value of the relevant market transactions.

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

Observable market parameters include, but are not limited to, exchange rates, interest rates, prices of securities and commodities, prices of derivatives, prices of other goods, and other parameters that can be directly inferred from them, such as interest rates, credit spreads, volatilities and implied correlations or other similar parameters. Non-observable factors are those based on working assumptions such as parameters contained in models or based on statistical or economic analyses, non-ascertainable in the market information.

Liquidity is an important component of market risk. In times of limited or no liquidity, instruments or goods may not be tradable or may not be tradable at their estimated value.

Operational risk is the risk of incurring a loss due to inadequate or failed internal processes, or due to external events, whether deliberate, accidental or natural occurrences. Management of operational risk is based on an analysis of the "cause – event – effect" chain.

Operational risk encompasses human resources risks, legal risks, tax risks, information system risks, misprocessing risks, risks related to published financial information and the financial implications resulting from compliance and reputation risks.

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

By definition, this risk is a sub-category of operational risk.

Reputation risk is primarily contingent on all the other risks borne by the Bank.
Asset-liability management risk is the risk of incurring a loss as a result of mismatches in interest rates, maturities or nature between assets and liabilities. For banking activities, asset-liability management risk arises in non-trading portfolios and primarily relates to global interest rate risk.
Liquidity and refinancing risk is the risk of the Bank being unable to fulfil its obligations at an acceptable price in a given place and currency.
Breakeven risk is the risk of incurring an operating loss due to a change in the economic environment leading to a decline in revenue coupled with insufficient cost-elasticity.
Concentration risk and its corollary, diversification effects, are embedded within each risk, especially for credit, market and operational risks using the correlation parameters taken into account by the corresponding risk models.
It is assessed at consolidated BNP Paribas Group level and at financial conglomerate level.

Table 3. Risk monitored by the BNP Paribas Group.

		Pillar 1		ICAAP (4)(Pillar 2)		
Risks affecting the Group's capital adequacy	Risks affecting the Group's value (share price)	Risk covered	Measurement and management method	Risk covered	Measurement and management method	**Additional risk identified by BNP Paribas**
Credit risk		√	Basel 2.5	√	Basel 2.5	
Counterparty risk		√	Basel 2.5	√	Basel 2.5	
Securitization		√	Basel 2.5	√	Basel 2.5	
Market risk		√	Basel 2.5	√	Basel 2.5	
Equity risk		√	Basel 2.5	√	Basel 2.5	
Operational Risk		√	Basel 2.5	√	Basel 2.5	
Concentration risk (1)				√	Internal Model	
Asset & liability management risk (2)				√	Internal Model	
Breakeven risk				√	Internal Model	
	Strategy risk			√	Procedures	
Liquidity and Refinancing risk				√	Quantitive and qualitative rules; stress tests	
	Compliance and Reputation risk			√	Procedures	
Insurance risks (3), including insurance subscription risks					Internal Model	√

(1) Concentration risk is managed within credit risk at BNP Paribas.
(2) Asset & liability management risk comes under what the banking supervisors call global interest rate risk.
(3) Insurance risks are not included in the scope of banking activities; insurance businesses are exposed to market risk, operational risk and insurance subscription risk.
(4) Internal Capital Adequacy Assessment Process.

3.3. Credit and Counterparty Risk

The BNP Paribas Group's gross exposure to credit risk stands at EUR 1,169 billion at 31 December 2013, compared with EUR 1,163 billion at 31 December 2012. This portfolio, which is analysed below in terms of its diversification, comprises all exposures to credit risk, excluding other non credit-obligation assets.
The table below shows also exposure to counterparty risk (measured as exposure at the time of default) by Basel asset class on derivatives contracts and securities lending/borrowing transactions, after the impact of any netting agreements.
Table 4. Counterparty risk exposures with the Basel 2 asset class breakdown

In millions of euros	**31 December 2013**		
	Exposure at default to counterparty risk		
	IRBA	**Standardised Approach**	**Total**
Central governments and central banks	13 642	0	13 642
Corporates	39 972	1 028	41 000
Institutions	22 356	884	23 240
Retail	-	18	18
TOTAL EXPOSURE	**75 970**	**1 930**	**77 900**

3.3.1. Credit risk

General credit policy and control and provisioning procedures are governed by the Global Credit Policy approved by the Risk Committee, chaired by the Chief Executive Officer.
The policy is underpinned by core principles related to compliance with the Group's ethical standards, clear definition of responsibilities, the existence and implementation of procedures and thorough analysis of risks. It is rolled down in the form of specific policies tailored to each type of business or counterparty.

3.3.1.1. Credit risk diversification

Industry diversification

The breakdown of exposure by business sector is monitored carefully and regularly. It is supported by a forward-looking analysis for dynamic management of the Bank's exposure.

Table 5. Breakdown of credit risk by Basel 2 asset class and by corporate industry at 31 December 2013.

Asset class	% of total exposure	Asset class	% of total exposure	Asset class	% of total exposure	Asset class	% of total exposure
Wholesale & trading	9%	Energy Excluding Electricity	6%	Other	10%	Utilities (electricity, gas, water, etc.)	6%
Metal & mining	6%	Retailers	5%	Healthcare & Pharmaceuticals	2%	Finance	6%
IT & electronics	2%	Construction	5%	B to B services	10%	Insurance	3%
Real estate	10%	Chemicals excluding Pharmaceuticals	2%	Communication services	2%		
Equipment excluding IT Electronic	5%	Agriculture, Food, Tobacco	5%	Transportation & logistics	6%		

Geographic diversification

Country risk is the sum of all exposures to obligors in the country concerned. It is not the same as sovereign risk, which is the sum of all exposures to the central government and its various branches. Country risk reflects the Bank's exposure to a given economic and political environment, which are taken into consideration when assessing counterparty quality.
The geographic breakdown below is based on the country where the counterparty conducts its principal business activities, without taking into account the location of its head office.

Table 6. Geographic breakdown of credit risk by counterparty's country of business at 31 December, 2013.

Region	% of total exposure	Region	% of total exposure
France	28%	Other European countries	17%
Belgium	12%	North America	15%
Luxembourg	2%	Asia & Pacific	7%
Italy	12%	Rest of the World	7%

The geographic breakdown of the portfolio's exposure has remained balanced and stable. The BNP Paribas Group's main focuses of concern were peripheral European countries, geopolitical risks in some countries and the economic performance of the emerging economies. As a result, such countries were more frequently reviewed in order to closely monitor the evolving political and economic situations and proactively manage the Group's exposure by anticipating the risk of deterioration.

3.3.1.2. Impairment and restructuring of financial assets

Impairment of loans and receivables and held-to-maturity financial assets, provisions for financing and guarantee commitments

An impairment loss is recognised against loans and held-to-maturity financial assets where (i) there is objective evidence of a decrease in value as a result of an event occurring after inception of the loan or acquisition of the asset; (ii) the event affects the amount or timing of future cash flows; and (iii) the consequences of the event can be reliably measured. Loans are initially assessed for evidence of impairment on an individual basis, and subsequently on a portfolio basis. Similar principles are applied to financing and guarantee commitments given by the Group, with the probability of drawdown taken into account in any assessment of financing commitments.

Changes in the amount of impairment losses recognised in profit and loss account under "Cost of risk". Any subsequent decrease in an impairment loss that can be related objectively to an event occurring after the impairment loss was recognised is credited to the profit and loss account, also under "Cost of risk". Once an asset has been impaired, the theoretical income earned on the carrying amount of the asset calculated at the original effective interest rate used to discount the estimated recoverable cash flows is recognised under "Interest income" in the profit and loss account.
Impairment losses on loans and receivables are usually recorded in a separate provision account which reduces the amount for which the loan or receivable was recorded in assets upon initial recognition. Provisions relating to off-balance sheet financial instruments, financing and guarantee commitments or disputes are recognised in liabilities. Impaired receivables are written off in whole or in part and the corresponding provision is reversed for the amount of the loss when all other means available to the Bank for recovering the receivables or guarantees have failed, or when all or part of the receivables have been waived.
Counterparties that are not individually impaired are risk-assessed on a portfolio basis with similar characteristics. This assessment draws upon an internal rating system based on historical data, adjusted as necessary to reflect circumstances prevailing at the balance sheet date.

Impairment of available-for-sale financial assets

Impairment of available-for-sale financial assets (which mainly comprise securities) is recognised on an individual basis if there is objective evidence of impairment as a result of one or more events occurring since acquisition.
Impairment losses taken against variable-income securities are recognised as a component of Revenues on the line "Net gain/loss on available-for-sale financial assets", and may not be reversed through the profit and loss account until these securities are sold. Any subsequent decline in fair value constitutes an additional impairment loss, recognised in the profit and loss account.
Impairment losses taken against fixed-income securities are recognised under "Cost of risk", and may be reversed through the profit and loss account in the event of an increase in fair value that relates objectively to an event occurring after the last impairment was recognised.

3.3.1.3. Loans with past-due instalments, whether impaired or not, and related collateral or other guarantees

The following table presents, the carrying amounts of financial assets that are past due but not impaired and impaired assets and related collateral or other guarantees. The amounts shown are stated before any provision on a portfolio basis.

Table 7. Loans with past-due instalments, whether impaired or not, and related collateral or other security.

								31 December 2013
	Maturities of unimpaired past-due loans							
In millions of euros	Total	Up to 90 days	Between 90 days and 180 days	Between 180 days and 1 year	More than 1 year	Impaired assets and commitments covered by provisions	Collateral received in respect of unimpaired past-due loans	Collateral received in respect of impaired Total assets
Available-for-sale financial assets (excl. variable-income securities)	-	-	-	-	-	52	-	-
Loans and receivables due from credit institutions	294	274	-	-	20	390	65	288
Loans and receivables due from customers	13 071	12 651	282	68	70	22 592	7 362	13 706
Held-to-maturity financial assets	-	-	-	-	-	-	-	-
Past-due assets, net of individual impairment provisions	**13 365**	**12 925**	**282**	**68**	**90**	**23 034**	**7 427**	**13 994**
Financing commitments given						584		149
Guarantee commitments given						828		295
Off-balance sheet nonperforming commitments, net of provisions						**1 412**	**-**	**444**
TOTAL	**13 365**	**12 925**	**282**	**68**	**90**	**24 446**	**7 427**	**14 438**

3.3.1.4. Internal rating system

The BNP Paribas Group uses an advanced internal ratings-based approach (IRBA) to credit risk for the retail, sovereign, institutions, corporate asset classes to calculate the regulatory capital requirements for Corporate and Investment Banking, French Retail Banking, part of BNP Paribas Personal Finance, BNP Paribas Fortis, BGL and BNP Paribas Securities Services (BP2S). For other businesses, the standardised approach is used to calculate regulatory capital based on external ratings. Each counterparty is rated internally by the BNP Paribas Group using the same methods, regardless of the approach used to calculate regulatory capital requirements.

There are twelve counterparty ratings. Ten cover performing clients with credit assessments ranging from "excellent" to "very concerning", and two relate to clients classified as in default, as per the definition by the banking supervisor.

For Corporate counterparties, the rating parameters and Global Recovery Rates applicable to each exposure are reviewed at least once a year as part of the loan approval process or annual credit review, drawing on the combined expertise of business line staff and, as a second pair of eyes, the GRM representatives. The Group has developed an indicative equivalence between the Bank's internal ratings and the long-term issuer ratings assigned by the major rating agencies. The Bank has a much broader clientele than just those counterparties rated by an external agency. An indicative equivalence is not relevant in Retail Banking. It is used when the internal ratings are assigned or reviewed in order to identify any differences between the Bank's assessment of a borrower's probability of default and that of one or more of the rating agencies. However, the internal ratings do not aim to reproduce or even approximate the external ratings. There are significant variances in both directions within the portfolio.

Loss Given Default is determined either using statistical models for books with the highest degree of granularity or using expert judgment based on comparative values, in line with a process similar to the one used to determine the counterparty rating for corporate books[2]. Loss Given Default is defined as the loss that the Bank would suffer in the event of the counterparty's default in times of economic slowdown, as required by regulations.

For benchmarking work on non retail exposures, internal ratings are compared with the external ratings of several agencies based on the mapping between internal and external rating scales. Some 10% to 15% of the BNP Paribas Group's corporate clients have an external rating and the benchmarking studies reveal a conservative approach to internal ratings.

[2] *Within the Group, the Corporate book includes institutions, corporates, specialised financing and sovereign states*

3.3.1.5. Corporate portfolio by class and internal rating

The following table provides the breakdown by internal rating of the corporate loans and commitments (asset classes: central governments and central banks, institutions and corporates) for all the BNP Paribas Group's business lines using the advanced IRBA.
The corporate exposure represented EUR 645 billion of the gross credit risk at 31 December 2013, including EUR 626 billion of performing loans and 19 billion of non-performing loans, compared with EUR 600 billion at 31 December 2012, including
EUR 587 billion of performing loans and 13 billion of non-performing loans.

As far as retail portfolio is concerned, the gross credit exposure represented EUR 187 billion at 31 December 2013, lightly decreased compared with 31 December 2012 (EUR 188billion).

Table 8. The internal rating and asset classes breakdown of corporate loans and commitments and retail exposures for business lines using the advanced IRBA method.

In millions of euros	Asset class	Internal rating 1	2	3	4	5	6	7	8	9	10	11	12	Total
Corporate portfolio	Central governments and central banks	140 496	31 557	4 240	2 576	1 934	1 037	1 175	542	420	174	3	0	**184 154**
	Institutions	4 080	40 335	10 853	4 828	5 991	2 636	1 094	842	213	313	574	169	**71 928**
	Corporates	12 315	48 420	51 603	60 789	64 710	62 863	43 735	15 044	5 948	5 433	12 854	5 269	**388 983**
Retail portfolio	Mortgages		27 759	13 666	21 825	17 574	9 987	4 645	2 548	1 309	1 065	901	686	**101 965**
	Revolving exposures		414	2 259	3 275	799	5 877	1 210	3 552	689	953	1 101	511	**20 640**
	Other exposures	10	6 578	4 895	9 775	11 001	14 563	9 644	5 354	2 607	3 309	2 637	2 085	**72 458**

3.3.1.6. Standardised approach

For exposures in the standardised approach, BNP Paribas uses the external ratings assigned by Standard & Poor's, Moody's and Fitch Ratings. These ratings are mapped into equivalent credit quality levels as required by the regulation framework in accordance with the instructions issued by the French banking supervisor (Autorité de Contrôle Prudentiel et de Résolution). When there is no directly applicable external rating, the issuer's senior unsecured rating may, if available, be obtained from external databases and used for risk-weighting purposes in some cases.

The following table gives the breakdown by counterparty credit rating of the loans and commitments for all Group business lines using the standardised approach. This exposure represented EUR 329 billion of the gross credit risk at 31 December 2013, compared with EUR 367 billion at 31 December 2011.

Table 9. Credit rating breakdown of the loans and commitments for the business lines using standardised approach.

Gross exposure in millions of euros	External rating AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ to B-	CCC+ to D	No external rating	Total
Central governments and central banks	17 310	885	5 147	360	155	28	1 430	**25 315**
Institutions	6 581	101	7 744	1388	85	3	2 196	**18 098**
Corporates	157	866	1496	423	194	52	119 386	**122 574**
Retail							162 958	**162 958**
Total								**328 945**

3.3.2. Counterparty risk

BNP Paribas is exposed to counterparty risk on its capital markets transactions. This risk is managed through the widespread use of standard close-out netting and collateral agreements and through a dynamic hedging policy. Changes in the value of the Bank's exposure are taken into account in the measurement of over-the-counter financial instruments through a credit value adjustment process.
Netting is used by the Bank to mitigate counterparty credit risk associated with derivatives trading. The main instance where netting occurs is in case of trades termination: if the counterparty defaults, all the trades are terminated at their current market value, and all the positive and negative market values are summed to obtain a single amount (net) to be

paid to or received from the counterparty. The balance ("close-out-netting") may be collateralised with cash, securities or deposits. The Bank also applies settlement netting in order to mitigate counterparty risk in case of currency settlements. This corresponds to the netting of all payments and receipts between the Bank and one counterparty in the same currency to be settled in the same day. The netting results in a single amount (for each currency) to be paid either by the Bank or by the counterparty.
Measurement of exposure. The Exposure at Default (EAD) for counterparty risk is measured using an internal model and is subsequently incorporated into the credit risk weighting system. It is based on Monte-Carlo simulations, which assess the possible movements in exposure value. The valuation of financial OTC-trades carried out by BNP Paribas as part of its trading activities includes credit value adjustments. It reflects the expected loss in fair value on a counterparty exposure based on the potential positive value of the contract, the counterparty default probability, and the estimated recovery rate.

Table 10. Exposures at default (EAD) by calculation approach.

In millions of euros	Internal model (EEPE)			NPV + Add-On			31 December 2013 TOTAL
	IRBA	Standardised	Sub-total	IRBA	Standardised	Sub-total	
Derivatives	56 279	4	56 283	0	1 771	1 771	**58 054**
Securities financing transactions and deferred settlement transactions	19 687	0	19 687	4	155	159	**19 846**
TOTAL	**75 966**	**4**	**75 970**	**4**	**1 926**	**1 930**	**77 900**

3.3.2.1. Monitoring and control of counterparty risk

Potential Future Exposures calculated by the system are compared with the limits assigned to each counterpart on a daily basis. In addition, this system can simulate new transactions and measure their impact on the counterparty portfolio. It is therefore an essential tool of the risk approval process.

3.3.3. Banking book securitisation

The BNP Paribas Group is involved in securitisation transactions as originator, sponsor and investor as defined by Basel 2.5.
The securitisation transactions are those defined in the CRD (Capital Requirement Directive) and described in Title V of the Decree of 20 February 2007.
As required by the CRD, assets securitised as part of proprietary securitisation transactions that meet Basel eligibility criteria, particularly in terms of significant risk transfer, are excluded from the regulatory capital calculation. Only BNP Paribas' positions in the securitisation vehicle, and any commitment subsequently granted to the securitisation vehicle, are included in the capital requirement calculation using the external ratings based approach.
Proprietary securitisation exposures that do not meet the Basel eligibility criteria remain in the portfolio to which they were initially assigned. The capital requirement is calculated as if they had not been securitised and is included in the section on credit risk.
The BNP Paribas Group's activities in each of these roles are described below:

Table 11. Securitised exposures and securitisation positions (held or acquired) by role

In millions of euros	31 December 2013	
BNP Paribas role	**Securitised exposures originated by BNP Paribas**	**Securitisation positions held or acquired (EAD)**
Originator	1 781	1 579
Sponsor	1	12 046
Investor	0	9 929
TOTAL	**1 782**	**23 554**

Proceeds from the sale of securitisation positions are recognized in accordance with rules for the category of origin of positions sold. Therefore, for positions classified as loans and receivables and as available-for-sale assets, proceeds from asset sales are deducted from cost of risk in an amount equal to the net amount previously recognised. Any remaining amount is recognised as net gains on available-for-sale assets and other financial assets not stated at fair value. For positions classified at fair value through profit or loss, proceeds from asset sales are recognised as net gains on financial instruments measured at fair value through profit or loss.

Proprietary securitisation (originator under Basel 2.5)
As part of the day-to-day management of liquidity, the BNP Paribas Group can securitise loans granted to Retail Banking customers, as well as loans granted to corporate customers, in order to transform them into liquid assets.

Securitisation as sponsor on behalf of clients
CIB Fixed Income carries out securitisation programmes on behalf of its customers. Under these programmes, liquidity facilities and, where appropriate, guarantees are granted to special purpose entities. These entities over which the BNP Paribas Group does not exercise control are not consolidated.

Securitisation as investor
The BNP Paribas Group's securitisation business as an investor (within the meaning of the regulations) is mainly carried out by CIB, Investment Solutions and BancWest. It also includes positions held by BNP Paribas Fortis.

Table 12. Securitisation positions by the calculation approach

In millions of euros		31 December 2013
Calculation approach	**Securitisation positions held or acquired (EAD)**	**Risk-weighted assets**
IRBA	22 294	14 588
Standarised	1 260	1 041
TOTAL	**23 554**	**15 629**

For rated securitisation positions, the BNP Paribas Group uses external ratings from the Standard & Poor's, Moody's, and Fitch rating agencies. These ratings are mapped to equivalent credit quality levels in accordance with the instructions of the French banking supervisor.

3.3.4. Credit risk mitigation techniques

Credit risk mitigants (CRM) are taken into account according to the Basel 2 rules. In particular, their effect is assessed under conditions characteristic of an economic downturn.
For the scope under the IRB approach, guarantees and collaterals are taken into account, provided they are eligible, by decreasing the Loss Given Default (LGD) parameter that applies to the transactions of the banking book.
For the scope under the standardised approach, guarantees are taken into account, provided they are eligible, by applying the more favourable risk weight of the guarantor to a portion of the secured exposure adjusted for currency and maturity mismatches. Collateral is taken into account as a decrease in the exposure, after adjustment for any currency and maturity mismatches. Guarantors are subject to the same rigorous credit risk assessment process as primary obligors.

3.3.4.1. IRB approach – corporate portfolio

The following table gives for the Corporate portfolio the breakdown by Basel asset class of the risk mitigation resulting from collateral and guarantees relating to the portfolio of loans and credit commitments for all the BNP Paribas Group's business lines using the advanced IRB Approach.

Table 13. Corporate portfolio by breakdown by Basel asset class of the risk mitigation technique for business lines using advanced IRB approach.

		31 December 2013		
		Risk mitigation		
In millions of euros	Total exposure	Guarantees and credit derivatives	Collateral	Total guarantees and collaterals
Central governments and central banks	184 154	4 703	85	4 788
Corporates	388 983	63 383	53 971	117 354
Institutions	71 928	3 267	1 038	4 305
TOTAL	**645 065**	**71 353**	**55 094**	**126 447**

3.3.4.2. Standardised approach – corporate portfolio

The following table gives for the Corporate portfolio the breakdown by Basel asset class of the risk mitigation resulting from collateral and guarantees relating to the portfolio of loans and credit commitments for all the BNP Paribas Group's business lines using the standardised approach.

Table 14. Corporate portfolio by breakdown by Basel asset class of the risk mitigation technique for business lines using standardised approach.

		31 December 2013		
		Risk mitigation		
In millions of euros	Total exposure	Guarantees and credit derivatives	Collateral	Total guarantees and collaterals
Central governments and central banks	25 315	0	0	0
Corporates	122 574	138	6 101	6 239
Institutions	18 098	0	55	55
TOTAL	**165 987**	**138**	**6 156**	**6 294**

3.4. Market risk

Market risk arises mainly from trading activities carried out by the Fixed Income and Global Equity & Commodity Derivatives teams within Corporate and Investment Banking and encompasses different risk factors related to different risk factors, i.e. interest rate risk, foreign exchange risk, equity risk, commodities risk, credit spread risk and volatility and correlation risks.

The market risk management system as well as financial products pricing aims to track and control market risks as well as control financial instrument valuation whilst ensuring that the Control functions remain totally independent from the business lines.

Within GRM, Risk-Investment and Markets (Risk-IM) has the responsibility to define, monitor and analyse risk sensitivities and risk factors, and to measure and control Value at Risk (VaR), which is the global indicator of potential losses.

Risk-IM ensures that all business activity complies with the limits approved by the various committees and approves new activities and major transactions, reviews and approves position valuation models and conducts a monthly review of market parameters (MAP review) in association with the Valuation and Risk Control Department (V&RC).

In 2013, total average VaR for the BNP Paribas is EUR 36 million (with a minimum of EUR 27 million and a maximum of EUR 60 million), after taking into account the EUR -42 million netting effect between the different types of risks. These amounts break down as follows.

Table 15. VaR measure for market risk as of 2013.

In millions of euros	Year to 31 December 2013			**31 December 2013**
	Minimum	Average	Maximum	
Interest rate risk	54	77	156	68
Credit risk	37	51	76	53
Foreign exchange risk	22	43	83	53
Equity price risk	35	65	133	61
Commodity price risk	8	11	17	10
Netting effect	0	-133	0	-139
Total Value at Risk	**86**	**114**	**188**	**106**

Since 31 December 2011, the European directive CRD3 (also called "Basle 2.5") applies and amends the Capital Requirements for market risk: Stressed VaR, Incremental Risk Charge (IRC), Comprehensive Risk Measure (CRM) and trading book securitisation.
Capital requirements for market risk by risk type and type of approach are presented in a table below.

Table 16. Capital requirements for market risk

In millions of euros		**31 December 2013**
Type of approach	Type of risk	
	VaR	508
	Stressed VaR	1 191
	IRC	480
	Correlation portfolio	112
Total Internal Model		**2 291**
Total Standardised approach		**140**
Trading Book Securitisation Positions		**66**
Total Value ar Risk		**2 497**

3.4.1. Interest rate risk

Interest rate risk related to the banking intermediation activities and investment is managed by ALM-Treasury. Transactions initiated by each BNP Paribas entity are transferred to ALM-Treasury via internal contracts booked in the management accounts or via loans and borrowings. ALM-Treasury is responsible for managing the interest rate risk transferred in this way.
Interest rate positions in the banking book are measured in terms of interest rate gaps, with embedded behavioural options translated into delta equivalents. In the interest rate gaps, the maturity split is determined on the basis of the contractual terms of the transactions and historical observations of customer behaviour. For Retail Banking products, behavioural models are based on historical data and econometric studies. The models deal with early repayments, current accounts in credit and debit and savings accounts. Theoretical maturities of equity capital are determined according to internal assumptions.
The sensitivity of revenues to a change in interest rates is one of the key indicators used by the Group in its analysis of overall interest-rate risk. The sensitivity of revenues is calculated across the entire banking book including the customer banking intermediation businesses, equity, and for all currencies to which the BNP Paribas Group is exposed. It relies on reasonable activity assumptions over the same horizon as the indicator.
The consolidated indicator is presented in the table below. Over this one-year horizon, the banking intermediation book's exposure to interest-rate risk is limited: an increase of 100 basis points in interest rates right across the yield curve would lead to a decrease of about 0.3% in the BNP Paribas Group's revenues, all currencies combined.

Table 17. Sensitivity of revenues to general interest-rate risk based on a 100 basis point increase in interest rates.

In millions of euro	31 December 2013		
	Euros	Other currencies	Total
Sensitivity of 2013 revenues	-98	-28	-126

3.4.2. Equity exposures in banking book

The shares held by the BNP Paribas Group outside trading portfolios are securities conferring residual and subordinated rights on issuer's assets or income, or securities representing a similar economic nature.
They encompass:

- listed and unlisted shares, including shares in investment funds;
- embedded options of convertible bonds, redeemable or exchangeable for shares;
- equity options;
- super-subordinated securities;
- private funds commitments;
- equity holdings hedge;
- consolidated entities using the equity method.

Table 18. Equity risk exposures.

In millions of euros	31 December 2013
Internal model method	**14 771**
Listed equities	3 504
Other equity exposures	9 858
Private equity in diversifi ed portfolios	1 409
Simple risk weight method	**692**
Listed equities	2
Other equity exposures	119
Private equity in diversified portfolios	571
Standardised approach	**707**
TOTAL	**16 170**

3.5. Operational risk

Operational risk management is governed by a strict regulatory framework:

- Basel Committee Regulation, which sets the rules for calculating the capital requirement in respect of operational risk;
- Regulation CRBF 97-02 as amended, which requires implementation of a risk management system covering all types of risk and an internal control system that ensures the effectiveness and quality of the Bank's internal operations, the reliability of internal and external information, the security of transactions and compliance with all laws, regulations and internal policies.

To meet this dual requirement of measuring and managing operational risk, BNP Paribas has developed a five-stage iterative risk management process based on the following items:

- identifying and assessing operational risks;
- formulating, implementing and monitoring the risk mitigation system, including procedures, checks and all organisational elements designed to help to control risk, such as segregation of tasks, management of access rights, etc.;
- producing risk measures and calculating the capital charge for operational risk;
- reporting and analysing oversight information relating to the operational permanent control process;
- managing the system through a governance framework that involves members of management, preparing and monitoring action plans.

Each legal entity of the prudential scope of the BNP Paribas Group has a calculation of its capital requirements. The amount of risk-weighted assets is calculated by multiplying the capital requirement by 12.5.
BNP Paribas uses a hybrid approach combining the Advanced Measurement Approach (AMA), standardised approach, and basic indicator approach.
For the Group the AMA methodology has been deployed in the most significant entities of each division or Retail Banking Operational entities. This includes most of Retail Banking in France and Italy, CIB, and Investment Solutions.
BNP Paribas Fortis and BGL BNP Paribas business lines, as well as a few other ex-Fortis subsidiaries, have also been using the Group's AMA model since 2012.