

# Information of Prudential Relevance 2012

Basel Accord PILLAR III

# Introduction

Circular 3/2008 dated May 22 of the Bank of Spain and its amendments 9/2010 dated December 22 and 4/2011 dated November 30 (hereinafter, the Solvency Circular) represent the final development of legislation on the capital base and supervision on a consolidated basis, within the scope of Spanish credit institutions.

This legislation established by Law 13/1985, dated May 25, on *Investment ratios, bank capital and reporting requirements of financial intermediaries* and other financial system regulations, and in Spanish Royal Decree 216/2008, dated February 15, on *Financial institutions' own funds*, constitutes as a whole the transposition to Spanish credit institutions of Community Directives 2006/48/EC, of June 14, *relating to the taking up and pursuit of the business of credit institutions* and 2006/49/EC, of June 14, on the *capital adequacy of investment firms and credit institutions*, of the European Parliament and of the Council.

In accordance with Rule 109 of the Solvency Circular, financial institutions have to publish a document called "Information of Prudential Relevance" including the contents stipulated in chapter 11 of this circular. This report has been drawn up in keeping with these stipulations.

In accordance with the policy defined by the Group for drawing up the Information of Prudential Relevance, the content of this report refers to December 31, 2012 and was approved by the Group's Audit and Compliance Committee, at its meeting held on April 2, 2013, having previously been reviewed by the External Auditor. This review has not revealed any material discrepancies concerning compliance with the reporting requirements laid down in the Bank of Spain Solvency Circular.

## Regulatory environment in 2012

### Legal changes in Spain

Laws have been published throughout 2012 affecting credit institutions, relating to the restructuring of the balances affected by impairment of assets linked to the real-estate sector, the regulation of the framework of restructuring and resolution of banks and the regulatory development of asset management companies. Below we highlight the main legal documents published in this area:

- Royal Decree-Law 2/2012: This Royal Decree-Law essentially structures the new

provision requirements aimed exclusively at covering the impairment in balances caused by the assets linked to real estate activity.

- Law 8/2012 (repealing Royal Decree-Law 18/2012): This law governs additional coverage requirements to those under Royal Decree-Law 2/2012 derived from the impairment of finance linked to real-estate activity classified as in a normal situation.

Law 9/2012 (repealing Royal Decree-Law 24/2012): This law is part of Spain's program of assistance for the recapitalization of the financial sector and implements the Memorandum of Understanding signed with the European authorities. In general, Law 9/2012 establishes the system of restructuring and resolution of credit institutions, as well as the legal development of asset management companies. Starting in January 2013 it also modifies the definition and requirements on the question of "principal capital" (a capital measure included in Royal Decree-Law 2/2011).

Circular 7/2012 on Principal Capital: Pursuant to Law 9/2012, starting on January 1, 2013 the principal capital requirements to be complied with by credit institutions were modified and

a requirements of 9% of total risk-weighted exposure was established. The definition of capital was in line with that established by the EBA in its Recommendation EBA/REC/2011/1.

### Legal changes in the Community area

#### European Commission/European Parliament/ European Council

In 2012, the EU has made progress in the process of negotiating the new solvency regulations to comply with Basel III, known at the European level as the "CRDIV package". The CRDIV package is composed of a regulation (CRR) that will be directly applicable in the different Member States and a Directive (CRD) that each national authority will have to transpose to its legislation. The CRDIV package is expected to be approved in 2013.

In addition we can highlight the following milestones in regulation at European level:

- In March, the European Commission published the green paper on the shadow banking system. This is a first step towards a detailed examination of the problems represented by the credit intermediation system made up of entities and activities

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Note: All figures have been rounded to present the amounts in million euros. As a result, the amounts appearing in some tables may not be the arithmetical sum of the preceding figures.

that are outside the international banking system.

- In June the European Commission published the proposed legislation establishing the framework for the recovery and resolution of credit institutions. This framework contains a broad catalog of measures to be adopted; in the first instance, to prevent credit institutions from reaching a situation of inviability that puts at risk the stability of the financial system; and in second place, for an orderly resolution of entities that are not viable.
- In October, the European Commission published the conclusions of the Liikanen group. The Liikanen group is a high-level consultative body whose main objective has been to analyze the need for structural reforms in the system. The group's report sets out recommendations in various areas, among them the structural separation of negotiation activities.
- In December, an agreement was reached for the European Central Bank to act as sole banking supervisor starting in March 2014.

### European Banking Authority

In accordance with the functions it has attributed to it, the European Banking Authority has in 2012 developed technical guides and standards for regulation.

With respect to Recommendation EBA/REC/2011 issued by EBA at the end of 2011; this Recommendation established that the banks subject to the Recommendation should maintain in June 2012 a Core Tier I level of 9% and an additional capital buffer for sovereign risk. The EBA has monitored compliance with this recommendation and has also expressed its intention to maintain it until the final adoption of the CRDIV package. At this moment, this requirement will be replaced by an amount equivalent in nominal terms.

### Legal changes in the international area

#### BIS

In 2012 the Basel Committee has continued to monitor and complete the legal reforms known as Basel III. For these purposes the Basel Committee has carried out an analysis (Level I and II) and has presented the first conclusions with respect to the level of implementation of the agreement at international level. The framework has also been complemented with the publication of the methodology for identifying systemic banks at a local level (D-SIBs).

The current solvency of the BBVA Group and its capacity to generate capital internally ensures compliance of the new Basel III requirements in the timetable of implementation established.

The Basel Committee continues committed to the continuous improvement of the solvency legislation governing banks and their supervision. The principles for banking supervision in 2012 have also been defined and legal initiatives have been put forward to modify substantially the market risk frameworks, securitizations and major risks.

#### FSB

The regulatory work of the FSB has mainly focused on subjects related to the identification of systemic banks, vigilance and regulation of shadow banks and improvements in disclosure.

*Systemic banks:* With respect to systemic banks, in November the FSB has updated the list of systemic banks and issued for consultation purposes guides designed to standardize the development of recovery/resolution plans to which the banks in question are subject. For these purposes it should be noted that BBVA has formed part of this group of systemic banks at a global level.

*Shadow banking:* In November FSB published for consultation recommendations aimed at improving the supervision and regulation of shadow banking. The consultation documents issued by FSB are focused mainly on:

- Analyzing and mitigating risks associated with other shadow banks

- Mitigating risks and reducing procyclicality related to REPO markets and security lending

The work of FSB is complemented with that carried out by the IOSCO on Money Market and Securitization Funds. Still pending is tackling the interactions between the financial system and shadow banking, which is expected to be addressed in 2013.

*Disclosure:* In October the FSB published the Enhanced Disclosures Task Force (EDTF), which includes recommendations on information to be disclosed to the market. In general it establishes recommendations to give users more information on:

- The model of business and main risks derived from it.
- The bank's liquidity position, sources of finance and preparedness to cover potential future needs.
- The calculation of risk-weighted assets and changes to the level of capital and risk-weighted assets.
- The relationship between a bank's market risks and its balance sheet.
- Policies of granting loans and modifications to these policies that could have an effect on the default rate.

# 1. General informational requirements

## 1.1. Company name and differences in the consolidated group for the purposes of the Solvency Circular and the Accounting Circular

### 1.1.1. Corporate name and scope of application

Banco Bilbao Vizcaya Argentaria, S.A. (hereinafter, "the Bank" or "BBVA") is a private-law entity subject to the rules and regulations governing banking institutions operating in Spain.

The Bylaws and other public information about the Bank are available for consultation at its registered address (Plaza San Nicolás, 4 Bilbao) and on its official website: [www.bbva.com](http://www.bbva.com).

In addition to the transactions it carries out directly, the Bank heads a group of subsidiaries, jointly-controlled and associate institutions which perform a wide range of activities and which, together with the Bank, constitute the Banco Bilbao Vizcaya Argentaria Group (hereinafter, «the Group» or «the BBVA Group»).

Circular 3/2008 and its amendments 9/2010 and 4/2011 are binding at a consolidated level for the entire Group.

### 1.1.2. Differences among the consolidated group for the purposes of the Solvency Circular and the Accounting Circular

The Group's consolidated financial statements are drawn up in accordance with what is laid down in the International Financial Reporting Standards adopted by the European Union (hereinafter, "EU-IFRS"). The EU-IFRS were adapted to the Spanish credit institution sector in Spain via Bank of Spain Circular 4/2004 of December 22, 2004 (hereinafter, "the Accounting Circular") as well as through its subsequent amendments, including Bank of Spain Circulars 6/2008 of November 26, 2008, 3/2010 of June 29, and 8/2010 of November 30.

For the purposes of the Accounting Circular, companies are considered to form part of a consolidated group when the controlling institution holds or can hold, directly or indirectly, control of them. For these purposes, an institution is understood to control another when it has the power to direct its policies as regards finance and the pursuit of its business

in order to obtain economic profit from its activities. In particular, control is presumed to exist when the controlling institution has a relationship with another, which is termed dependent, in some of the following situations:

- It holds the majority of voting rights.
- It is entitled to appoint or dismiss the majority of the members of its governing body.
- By agreements subscribed with other partners, it can avail itself of the majority of voting rights.
- It has appointed exclusively with its votes the majority of the members of the governing body who are undertaking their responsibilities at the time the consolidated accounts must be drawn up and during the two fiscal years immediately preceding that moment. This case will not give rise to consolidation if the company whose directors have been appointed is bound to another in any of the cases described in the first two bullets of this section.

Therefore, in drawing up the Group's consolidated financial statements, all dependent companies have been consolidated by applying the full consolidation method.

The Group's accounting policy applied to jointly-controlled entities (those which are not dependent and are jointly-controlled under contractual agreement through unanimous consent of the equity holders) is as follows:

- Jointly-controlled financial entities: the proportionate consolidation method is applied.
- Jointly-controlled non-financial entities: the equity method is applied.

Moreover, associates, meaning those over which the Group holds a significant influence but which are neither dependent nor jointly-controlled, are valued using the equity method.

A list of all the companies forming part of the BBVA Group is included in the Appendices of the Consolidated Report.

For the purposes of the Solvency Circular, as set out in Spanish Law 36/2007, heading two, section 3.4, the consolidated group comprises the following subsidiaries:

- Credit institutions.
- Investment services companies.
- Open-end funds.
- Companies managing mutual funds, together with companies managing pension funds, whose sole purpose is the administration and management of the aforementioned funds.
- Companies managing mortgage securitization funds and asset securitization funds.
- Venture capital companies and venture capital fund managers.
- Institutions whose main activity is holding shares or investments, unless they are mixed-portfolio financial corporations supervised at the financial conglomerate level.

Likewise, the special-purpose entities whose main activity implies a prolongation of the business of any of the institutions included in the consolidation, or includes the rendering of back-office services to these, will also form part of the consolidated group.

However, according to the provisions of this law, insurance entities and some service firms do not form part of consolidated groups of credit institutions.

Therefore, for the purposes of calculating solvency requirements, and hence the drawing up of this Information of Prudential Relevance, the perimeter of consolidated institutions is different from the perimeter defined for the purposes of drawing up the Group's financial statements.

The outcome of the difference between the two regulations is that institutions, largely real-estate, insurance and service companies, which are consolidated in the Group's annual accounts by the full or proportionate consolidation method, are consolidated for the purposes of Solvency by applying the equity method. In addition, insurance companies in which the holding is over 20% and financial

institutions in which the holding of over 10% are deducted from capital.

The Annex of this report presents a list of these institutions.

### 1.1.3. Main changes in the Group's scope of consolidation in 2012

See Note 3 of the Consolidated Financial Statement for more information.

#### Acquisition of Unnim

On March 7, 2012 the Governing Committee of the Fund for Orderly Bank Restructuring (FROB) assigned Unnim Banc, S.A. (hereinafter "Unnim") to BBVA as part of the competitive process for restructuring it.

As a result, a purchase-sale contract for shares was concluded between FROB, the Credit Institution Deposit Guarantee Fund (hereinafter "FGD") and BBVA, under which the Bank would acquire 100% of the shares of Unnim for 1 euro.

A Protocol of Financial Support Measures was also signed to restructure Unnim, regulating an asset protection scheme (EPA) by which for a 10 years period the FGD would assume 80% of the losses from a portfolio of predetermined Unnim assets, once the existing provisions for these assets had been applied.

On July 27, 2012, once the operation was concluded, BBVA became the holder of 100% of the capital of Unnim.

As of December 31, 2012, Unnim had a volume of assets of €24,756 million, of which €15,932 million correspond to "Loans and advances to customers", and a volume of "Customer deposits" of €11,083 million.

#### Sale of the businesses in Puerto Rico

On June 28, 2012, BBVA reached an agreement for the sale of its businesses in Puerto Rico to the financial group Oriental Financial Group Inc.

The sale was closed on the corresponding authorizations were obtained, on December 18, 2012, when the BBVA Group gave up control over these businesses.

## 1.2. Identification of dependent institutions with capital resources below the minimum requirement. Possible impediments for transferring capital

There is no institution in the Group not included in the consolidated group under the Solvency Circular whose capital resources are below the regulatory minimum requirement.

The Group operates in Spain, Mexico, the United States and 30 other countries, largely in Europe and Latin America. The Group's banking subsidiaries around the world are subject to supervision and regulation by a number of regulatory bodies with respect to

issues such as compliance with a minimum level of regulatory capital. The obligation to comply with these capital requirements may affect the capacity of these banking subsidiaries to transfer funds to the parent company via dividends, loans or other means.

In some jurisdictions in which the Group operates, the law lays down that dividends may only be paid with the funds legally available for this purpose.

## 1.3. Exemptions from capital requirements at the individual or sub-consolidated level

In keeping with the provisions of Rule Five of the Solvency Circular, on the exemption from individual or consolidated compliance with the aforementioned Rule for Spanish credit

institutions belonging to a consolidable group, the Group obtained exemption from the Bank of Spain on December 30, 2009 for the following companies:

- Banco Industrial de Bilbao, S.A.
- Banco de Promoción de Negocios, S.A.
- BBVA Banco de Financiación, S.A.
- Banco Occidental, S.A.

## 1.4. Risk management policies and targets

### 1.4.1. General principles of risk management

The aim of the Global Risk Management (GRM) function is to preserve the BBVA Group's solvency, help define its strategy with respect to risk and assume and facilitate the development of its businesses. Its activity is governed by the following principles:

- The risk management function is unique, independent and global.
  - The risks assumed by the Group must be compatible with the capital adequacy target and must be identified, measured and assessed. Risk monitoring and management procedures and sound control and mitigation systems must likewise be in place.
  - All risks must be managed integrally during their life cycle, and be treated differently depending on their nature and with active portfolio management based on a common measure (economic capital).
  - It is each business area's responsibility to propose and maintain its own risk profile, within its autonomy in the corporate
- action framework (defined as the set of risk control policies and procedures defined by the Group), using an appropriate risk infrastructure to control risks.
- The infrastructures created for risk control must be equipped with means (in terms of people, tools, databases,

information systems and procedures) that are sufficient for their purpose, so that there is a clear definition of roles and responsibilities, thus ensuring efficient assignment of resources among the corporate area and the risk units in business areas.

In the light of these principles, the BBVA Group has developed an integrated risk management system that is structured around three main components:

- A corporate risk management scheme (with a proper segregation of duties and responsibilities).
- A set of tools, circuits and procedures that make up the schemes in the different management models.
- A system of internal control in line with the nature and size of the risks assumed.

### 1.4.2. Corporate governance layout

The BBVA Group has developed a system of corporate governance that is in line with the best international practices and adapted it to the requirements of the regulators in the country in which its different units operate.

With respect to the risks assumed by the Group, the Board of Directors of the Bank is responsible for establishing the general principles that define the risk objectives profile of the entities, approving the management policies for control and management of these risks and

ensuring regular monitoring of the internal systems of risk information and control. The Board is supported in this function by the Executive Committee and the Risk Committee. The main mission of the latter is to assist the Board in carrying out its functions associated with risk control and management.

### 1.4.3. The risk function

The risk management and control function is distributed among the risk units within the business areas and the Corporate Global Risk Management (GRM) area, which ensures compliance with global policy and strategies. The risk units in the business areas propose and manage the risk profiles within their area of autonomy, though they always respect the corporate framework for action.

The Corporate GRM area combines a vision by risk type with a global vision. It is divided into five units, as follows:

- Corporate Risk Management and Risk Portfolio Management: Responsible for the management and control of the Group's financial risks.
- Operational and Control Risk: Manages operational risk, internal risk control and internal validation of the measurement models and the acceptance of new risks.
- Technology & Methodologies: Responsible for the management of the technological and methodological developments required for risk management in the Group.

- Technical Secretary: Undertakes technical tests of the proposals made to the Risk Management Committee and the Risk Committee; prepares and promotes the regulations applicable to social and environmental risk management.
- Retail Banking: Has responsibilities in the geographical areas of Turkey, Switzerland and Asia, supports development and innovation in retail banking, supports the Lines of Business (LOBs) in insurance, asset management, consumer finance and collection and payment services. This unit centralizes non-banking risk management (insurance and funds) and the fiduciary risk management of the Retail Banking business.

This structure therefore gives the Corporate GRM area reasonable security with respect to:

- Integration, control and management of all the Group's risks;
- The application throughout the Group of standard principles, policies and metrics; and
- The necessary knowledge of each geographical area and each business.

This organizational scheme is complemented by various committees, which include the following:

- The Risk Management Committee: This committee is made up of the risk managers from the risk units located in the business areas and the managers of the Corporate GRM area units. Among

its responsibilities are the following: establishing the Group's risk strategy (especially as regards policies and structure of this function in the Group); presenting its proposal to the appropriate governing bodies for their approval; monitoring the management and control of risks in the Group; and adopting any actions necessary.

- The Global Risk Management Committee: Made up of the executive managers of the Group's risk unit and those responsible for risks in the different countries and business areas. It reviews the Group's risk strategy and the main risk projects and initiatives in the business areas.
- The Risk Management Committee: Its permanent members are the Global Risk Management Director, the Corporate Risk Management Director and the Technical Secretary. The other committee members propose the operations that are analyzed at its working sessions. The committee analyzes and, if appropriate, authorizes, financial programs and operations within its scope and submits the proposals whose amounts exceed the set limits to the Risks Committee, when its opinion on them is favorable.
- The Assets and Liabilities Committee (ALCO): The committee is responsible for actively managing structural interest-rate and foreign-exchange risk positions, global liquidity and the Group's capital resources.
- The Global Corporate Assurance Committee: Its task is to undertake a review at both Group and business unit

level of the control environment and the effectiveness of the operational risk internal control and management systems; as well as to monitor and analyze the main operational risks the Group is subject to, including those that are cross-cutting in nature. This committee is therefore the highest operational risk management body in the Group.

- The Technology and Methodologies Committee: The committee decides on the effectiveness of the models and infrastructures developed to manage and control risks integrated in the business areas, within the framework of the operational model of Global Risk Management.
- The New Business and Product Committees: Their functions are to study and, if appropriate, to grant technical approval and implement the new businesses, products and services before they are put on the market; to undertake subsequent control and monitoring for newly authorized products; and to foster business in an orderly way to enable it to develop in a controlled environment in line with the best practices and appetite for risk.

#### 1.4.3.1. The Group's General Risk Policy (appetite for risk)

The BBVA Group's General Risk Policy (appetite for risk) expresses the levels and types of risk that the Bank is prepared to assume to carry out its strategic plan without significant deviations, even in situations of

tension. The aim of the organization is not to eliminate all risks, but to assume a prudent level of risks that allows it to generate returns while maintaining acceptable capital and fund levels and generating recurrent earnings.

Senior management is responsible for approving and reviewing the Group's General Risk Policy at least once a year, as well as executing and managing the framework for guaranteeing that the Group's effective risk profile is aligned with the General Risk Policy.

The BBVA Group's risk policy aims to achieve a moderate risk profile through prudent management; a model of universal banking, diversified by geographical areas and types of assets, portfolios and customers; a high international presence, both in emerging and developed countries, while maintaining a medium/low risk profile in each; and sustainable growth over time, with an external credit rating of at least A- in normal circumstances.

The Group's risk policy established by its governing bodies will be developed and implemented across the organization through the Risk Area, which is independent of the business areas. This area will also carry monitor the policy and report periodically to the competent governing bodies on its application and development, with any proposals that it considers appropriate for improvement.

The Group will have an adequate risk culture aimed at ensuring application of its policies and achievement of the objectives set. It will comply at all times with applicable

regulations in each jurisdiction in which it operates and with the Group's own internal rules.

A series of basic metrics have been established, essentially related to solvency, liquidity and recurrent earnings. They determine the Group's risk management according to each case and allow the desired objectives to be achieved. The analysis of these elements is carried out both in specific cases and proactively through stress-testing exercises that identify possible threats and thus develop corrective action in advance.

- **Solvency:** In terms of solvency, BBVA's management aims to maintain a sufficient capital level for the correct development of businesses, even in a situation of severe economic and financial shock.
- **Profitability and Recurrence:** The Group has the goal of generating recurrent earnings even in a deteriorated economic situation, to guarantee a reasonable level of profitability for shareholders.
- **Liquidity and funding:** In terms of liquidity and funding, the BBVA Group as a whole, and all its subsidiaries individually, aim to maintain a solid position supported by a stable and diversified funding base, even in moments of tension.

#### 1.4.4. Scope and nature of the risk measurement and reporting systems

Depending on their type, risks fall into the following categories:

- Credit risk
- Market risk
- Operational risk
- Structural risks

There follows a description of the risk measurement systems and tools for each kind of risk.

##### 1.4.4.1. Credit risk

Credit risk arises from the probability that one party to a financial instrument will fail to meet its contractual obligations for reasons of insolvency or inability to pay and cause a financial loss for the other party.

BBVA quantifies its credit risk using two main metrics: expected loss (EL) and economic capital (EC). The expected loss reflects the average value of the losses. It is considered a cost of the business and is associated with the Group's policy on allowances. Economic capital is the amount of capital considered necessary to cover unexpected losses if actual losses are greater than expected losses.

These risk metrics are combined with information on profitability in value-based management, thus building the profitability-risk binomial into decision-making, from the definition of business strategy to approval of individual loans, price setting, assessment of non-performing portfolios, incentives to areas in the Group, etc.



There are three essential parameters in the process of calculating the EL and EC measurements: the probability of default (PD), loss given default (LGD) and exposure at default (EAD). They are generally estimated using historical information available in the systems, and assigned to operations and customers according to their characteristics. In this context, the credit rating tools (ratings and scorings) assess the risk in each transaction/customer according to their credit quality by assigning them a score, which is used in assigning risk metrics together with other additional information: transaction seasoning, loan to value ratio, customer segment, etc.

Point 4.5.1.7 of this document details the definitions, methods and data used by the Group to estimate and validate the parameters of probability of default (PD), loss given default (LGD) and exposure at default (EAD).

The credit risk for the BBVA Group's global portfolio is measured through a portfolio model that includes the effects of concentration and diversification. The aim is to study the loan book as a whole, and to analyze and capture the effect of the interrelations between the different portfolios.

This model not only provides a more complete calculation of capital requirements, but is also a key tool for credit risk management. It is a core of the Asset Allocation model, which is an efficient portfolio allocation model based on the profitability-risk binomial.

The Portfolio Model considers that risk comes from various sources (it is a multi-factor model). This feature implies that economic capital is sensitive to geographic diversification, a crucial aspect in a global entity like BBVA. In addition, and within the framework of the Asset Allocation project, the sector axis has, together with the geographical, become key for the analysis of business concentration. Finally, the tool is sensitive to concentration in certain credit exposures of the entity's large clients.

#### 1.4.2.2. Market risk

Market risk is due to the possibility of losses in the value of positions held as a result of changing market prices of financial instruments. It includes three types of risk:

- Interest-rate risk: This is the risk resulting from variations in market interest rates.
- Currency risk: This is the risk resulting from variations in foreign-currency exchange rates.
- Price risk: This is the risk resulting from variations in market prices, either due to factors specific to the instrument itself, or alternatively due to factors which affect all the instruments traded on a specific market.

In addition, for certain positions, other market risks also need to be considered: credit spread risk, basis risk, volatility and correlation risk.

(See Chapter 5 "Market risk in trading book activities").

#### 1.4.4.3. Operational risk

Operational risk is defined as the one that could potentially cause losses due to human errors, inadequate or faulty internal processes, system failures or external events. (See Chapter 6 "Operational Risk")

#### 1.4.4.4. Structural risks

Below is a description of the different types of structural risk:

##### • Structural interest-rate risk

Movements in interest rates lead to changes in a bank's net interest income and book value, and constitute a key source of asset and liability interest-rate risk. The extent of these impacts will depend on the bank's exposure to changes in interest rates. This exposure is mainly the result of the different maturity and repricing terms of the assets and liabilities on the banking book and the off-balance-sheet positions.

A financial institution's exposure to adverse changes in market rates is a risk inherent in the banking business, while at the same time representing an opportunity to generate value. That is why the structural interest rate should be managed effectively and have a reasonable relation both to the bank's capital base and the expected economic result. This function is handled by the Balance-Sheet Management unit, within the Financial Management area. Through the Asset and Liability Committee (ALCO) it is in charge of maximizing the Bank's economic value, preserving the

net interest income and guaranteeing the generation of recurrent earnings. In pursuance of this, the ALCO develops strategies based on its market expectations, within the risk profile defined by the BBVA Group's management bodies and balance the expected results and the level of risk assumed. BBVA has a transfer pricing system that centralizes its interest-rate risk on ALCO's books and helps to ensure that balance-sheet risk is being properly managed.

The Corporate Risk Management unit is responsible for controlling and monitoring asset and liability interest-rate risk, acting as an independent unit to guarantee that the risk management and control functions are properly segregated. This policy is in line with the Basel Committee on Banking Supervision recommendations. It constructs the asset and liability interest-rate risk measurements used by the Group's management, as well as designing models and measurement systems and developing monitoring, information and control systems. At the same time, through the Risk Management Committee it carries out the function of risk control and analysis reporting to the main governing bodies, such as the Executive Committee and the Board of Directors' Risk Committee.

BBVA's structural interest-rate risk management procedure has a sophisticated set of metrics and tools that enable its risk profile to be monitored precisely. This model is based on a carefully studied set of hypotheses which aim to characterize the behavior of the balance sheet exactly. The measurement of interest-rate risk includes probabilistic metrics, as well as a calculation of sensitivity

to a parallel movement of  $\pm 100$  basis points in the market curves. There is regular measurement of the Bank's earnings at risk (EaR) and economic capital, defined as the maximum adverse deviations in net interest income and economic value, respectively, for a particular confidence level and time horizon. The deviations are obtained by applying a method for simulating interest-rate curves that takes into account other sources of risk in addition to changes in direction, such as changes in the slope and curvature, as well as considering the diversification between currencies and business units. The model is subject to regular internal validation, which includes backtesting.

Each entity's risk appetite, as determined by the Executive Committee, is expressed through the limit structure, which is one of the mainstays of control policies. Thus, the maximum negative impacts, in terms of both earnings and value, are controlled in each of the Group's entities through this limits policy.

The risk measurement model is supplemented by analysis of specific scenarios and stress tests. Stress tests have taken on particular importance in recent year, so a greater emphasis has been placed on the analysis of extreme scenarios in a possible breakthrough in both current interest-rate levels and historical correlations and volatility. At the same time, the evaluation of scenarios forecast by the Economic Research Department has been maintained.

- **Structural exchange-rate risk**

The Group's structural exchange-rate risk management aims to minimize the

potential negative impact from fluctuations in exchange rates on the book value and on the contribution to earnings of international investments maintained on a long-term basis by the Group.

The Corporate Risk Management unit acts as an independent unit that is responsible for monitoring and analyzing risks, standardizing risk management metrics and providing tools that can anticipate potential deviations from targets. It also monitors the level of compliance of established risk limits, and reports regularly to the Risk Management Committee, the Board of Directors' Risk Committee and the Executive Committee, particularly in the case of deviation or tension in the levels of risk assumed.

The Balance Sheet Management unit, through ALCO, designs and executes the hedging strategies with the main purpose of minimizing the effect of exchange-rate fluctuations on capital ratios, as well as assuring the equivalent value in euros of the foreign-currency earnings of the Group's subsidiaries, adjusting transactions according to market expectations and hedging costs. The Balance Sheet Management area carries out this work by ensuring that the Group's risk profile is at all times adapted to the framework defined by the limits structure authorized by the Executive Committee. To do so, it uses risk metrics obtained according to the corporate model designed by the Global Risk Management area.

The corporate model is based on simulating exchange-rate scenarios according to historical trends, and evaluating the

impact on capital ratios, equity and the Group's income statement. This provides a distribution of the impact on the three core elements, which helps determine their maximum adverse deviation for a particular confidence level and time horizon, depending on market liquidity in each currency. The risk measurements are completed with analysis of scenarios, stress testing and backtesting, thus giving a complete overview of the Group's exposure to structural exchange-rate risk.

- **Structural risk in the equity portfolio**

The Corporate Risk Management unit undertakes ongoing monitoring of structural risk in its equity portfolio, in order to constrain the negative impact that an adverse performance by its holdings may have on the Group's solvency and earnings recurrence. This ensures that the risk is maintained within levels that are compatible with BBVA's target risk profile.

The scope of monitoring includes the holdings that the Group has in the capital of other industrial or financial companies with a medium or long-term investment horizon. These holdings therefore include those accounted in the investment portfolio and those that are consolidated in the accounts, although in the latter case changes in value do not have an immediate effect on equity. In order to determine exposure, the positions held in derivatives of underlying assets of the same kind are considered in order to limit portfolio sensitivity to potential falls in prices.

The Global Risk Management corporate area estimates the levels of risk assumed

and monitors the level of compliance with the limits set, according to the appetite for risk and as authorized by the Executive Committee. It reports on these levels regularly to the Group's senior management. The mechanisms of risk control and limitation hinge on the key aspects of exposure, earnings and economic capital. Economic capital measurements are also built into the risk-adjusted return metrics to ensure efficient capital management in the Group. The Corporate Risk Management unit is also responsible in Global Risk Management for informing the Executive Committee and Risk Committee on the repercussion on the BBVA Group of critical market situations that could take place in the future. To carry out a more in-depth analysis, stress tests and sensitivity analyses are carried out from time to time against different simulated scenarios, using both past crisis situations and forecasts by BBVA Research as the base. On a monthly basis, backtesting is carried out on the risk measurement model used.

- **Liquidity risk**

The aim of liquidity risk management, tracking and control is to ensure, in the short term, that the payment commitments of the BBVA Group entities can be duly met without having to resort to borrowing funds under burdensome terms, or damaging the image and reputation of the entities. In the medium term the aim is to ensure that the Group's financing structure is ideal and that it is moving in the right direction with respect to the economic situation, the markets and regulatory changes.

(See Chapter 9 "Liquidity Risk and Finance")

### 1.4.5. Internal control system

The BBVA Group's internal control system is based on the best practices developed in "Enterprise Risk Management - Integrated Framework" by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) as well as in "Framework for Internal Control Systems in Banking Organizations" by the Bank for International Settlements (BIS).

The Group's system for internal control is therefore part of the Integrated Risk Management Framework. This is the system within the Group that involves the Board of Directors, management and its entire staff. It is designed to identify and manage risks facing the Group entities in such a way as to ensure that the business targets established by the Group's management are met. The Integrated Risk Management Framework is thus made up of specialized units (Compliance, Global Accounting & Information Management, and Legal Services), together with the Corporate Operational Risk Management and Internal Audit functions.

Among the principles underpinning the Internal Control system are the following:

- Its core element is the "process."

- The form in which the risks are identified, valued and mitigated must be unique for each process; and the systems, tools and information flows that support the internal control and operational risk activities must be unique, or at least be administered fully by a single unit.

- The responsibility for internal control lies with the Group's business units, and at a lower level, with each of the entities that make them up. Each business unit's Operational Risk Management Unit is responsible for implementing the system of control within its scope of responsibility and managing the existing risk by proposing any improvements to processes it considers appropriate.

- Given that some business units have a global scope of responsibility, there are cross-cutting control functions which supplement the control mechanisms mentioned above.

- The Operational Risk Management Committee in each business unit is responsible for approving suitable mitigation plans for each existing risk or shortfall. This committee hierarchy culminates at the Group's Global Corporate Assurance Committee.

- The specialized units promote policies and draw up internal regulations. It is the responsibility of the Corporate Risk Area to develop them further and apply them.

### 1.4.6. Risk protection and reduction policies. Supervision strategies and processes

The Group applies a credit risk protection and mitigation policy deriving from its business model focused on relationship banking. On this basis, the provision of guarantees may be a necessary instrument but one that is not sufficient when taking risks; this is because for the Group to assume risks, it needs to verify the payment or resource generation capacity to comply with repayment of the risk incurred.

This is carried out through a prudent risk management policy which consists of analyzing the financial risk in a transaction, based on the repayment or resource generation capacity of the credit receiver, the provision of guarantees in any of the generally accepted ways (monetary, collateral or personal guarantees and hedging) appropriate to the risk borne, and lastly on the valuation of the recovery

risk (the asset's liquidity) of the guarantees received.

In the Group, monitoring plays a fundamental role in the risk management process and the scope of action of this function extends to all the phases in this process (acceptance, monitoring and recovery), guaranteeing that each risk is dealt with according to its status and defining and fostering measures to appropriately manage deteriorating risk.

Each business area is responsible for initially monitoring risk quality in its business segment referring to outstanding exposure, outstanding deteriorating exposure and past due exposure. The corporate Monitoring area supervises this function, offering its global vision and fulfilling, amongst others, the following tasks:

- Monitoring the achievement of the asset quality targets.
- Monitoring the outstanding risks that are under watch, deteriorating and past due.
- Monitoring trends in concentration, expected loss and capital use in the main risk groups.
- Benchmarking the risk quality parameters.
- Special monitoring of sensitive portfolios.

## 2. Information on total eligible capital

### 2.1. Characteristics of eligible capital

For the purposes of calculating its minimum capital requirements, the Group follows Rule Eight of the Solvency Circular, for defining the elements comprising its Basic Capital, Additional Capital and, if applicable, auxiliary capital, considering their corresponding deductions as defined in Rule Nine. The spread of the various component elements of capital and the deductions between basic capital, additional capital and auxiliary capital, together with compliance with the limits stipulated both on some of the elements (preferred securities, subordinated, etc.) and also on the different kinds of funds, are all in keeping with the dispositions in Rule Eleven.

In line with what is stipulated in the Solvency Circular, basic capital essentially comprises:

- Common equity: This is the Bank's share capital.
- Share premium.
- Retained profits and undisclosed reserves: These are understood to be those produced and charged to profits when their balance is in credit and those amounts which, without being included on the income statement must be booked in the "other reserves" account, in

keeping with the dispositions contained in the Accounting Circular. In application of Rules Eighteen and Fifty-one of the aforementioned Accounting Circular, exchange rate differences will also be classified as reserves. Likewise, valuation adjustments in the coverage of net investments in businesses abroad and the balance of the equity account which contains remuneration accrued on capital instruments will also be included in reserves.

- Minority interests: The holdings representing minority interests, and corresponding to those ordinary shares in the companies belonging to the consolidated group that are fully paid up, excluding the part which is included in revaluation reserves and in valuation adjustments. Earnings net of dividends attributable to these shareholders are also included hereunder. In any event, the fraction over and above 10% of the Group's total basic capital would not be considered eligible basic capital.
- Net income for the year referring to the perimeter of credit institutions, deducting the amount corresponding to interim and final dividend payments.

- Preferred securities mentioned in Article 71 of Spanish Law 13/1985 and issued pursuant to its Additional Second Provision, independently of whether or not they are recorded as a financial liability, and mandatory convertible debt instruments, including those issued under the Temporary Third Provision of Royal Decree-Law 2/2011, of February 18, provided they comply with the requirements of the aforementioned Additional Second Provision for eligibility of preferred securities and provisions 6 and 8 of Circular 4/2011 of November 30.

Capital is, moreover, adjusted mainly through the following deductions:

- Intangible assets and goodwill.
- Shares or other securities booked as own funds that are held by any of the Group's consolidated institutions, together with those held by non-consolidated institutions belonging to the economic group, although in this case up to the limit stipulated in Solvency Circular, Rule Nine, section 1, letter c).
- Finance for third parties with the aim of acquiring shares or other securities eligible

as bank capital of the financier or of other institutions in its consolidable group.

- The outstanding debit balance of each of the total equity accounts that reflect valuation adjustments in available-for-sale financial assets and exchange-rate variations.
- There are other deductions which are split equally; 50% to basic capital and 50% to additional capital:
  - a. Holdings in financial institutions that may be consolidated by virtue of their activity, but which are not part of the Group, when the holding exceeds 10% of the subsidiary's capital.
  - b. The bank capital requirements for insurance companies when the direct or indirect holding amounts to 20% or more of the capital of these companies.
  - c. Shortfall of provisions, if any, for the expected loss in positions calculated according to the model based on internal ratings, as well as the amount of securitizations that receive a risk weighting of 1.250%, as indicated by Rule Nine of the Circular.

Total eligible capital also includes additional capital, which is largely made up of the following elements:

- Subordinated debt received by the Group, understood as that which, for credit seniority purposes, comes behind all the common creditors. The issues, moreover, have to fulfill a number of conditions which are laid out in Rule Eight of the Solvency Circular. In keeping with Rule Eleven of the aforementioned Circular, this item should not account for more than 50% of basic capital.
- Preferred securities issued by subsidiary companies which exceed the limits stipulated in Rule Eleven for the purpose of their inclusion as basic capital, provided they fulfill the requirements listed in Rule Eight, section 5.
- The Solvency Circular has opted for including as eligible 45% the gross amounts of net capital gains on capital instruments that are booked as valuation adjustments on financial assets available for sale, instead of the option of including them net of tax. When these valuation adjustments give rise to capital losses, these are deducted from basic capital.
- The surplus resulting between the allowances for losses on risks related to exposures calculated as per the IRB method on the losses they are expected to incur, for the part that is below 0.6% of

the risk-weighted exposures calculated according to this method.

It will also include the book balances of generic allowances referring to securitized exposures which have been excluded from the risk-weighted exposures calculation under the IRB method, for the part not exceeding 0.6% of the risk-weighted exposures that would have corresponded to these securitized exposures, had they not been excluded. There is no treatment defined for the surplus of allowances over expected loss in portfolios assessed under the Advanced Measurement Approach above the 0.6% limit.

Furthermore, the book balance for generic allowances for losses reached in keeping with the Accounting Circular and which corresponds to those portfolios which are applied the standardized approach, for an amount up to 1.25% of the weighted risks that have been the basis for the coverage calculation, will also be considered eligible additional capital. Generic allowances for losses for those securitized assets that have been excluded from the risk-weighted exposures under the standardized approach are also eligible up to a limit of 1.25% of the weighted risks that would have corresponded to them, had they not been excluded. The surplus over the 1.25% limit is deducted from exposure.

- 50% of the deductions mentioned above when we discussed basic capital are assigned to additional capital.

## 2.2. Amount of eligible capital resources

The accompanying table shows the amount of eligible capital resources, net of deductions,

of the different elements comprising the capital base:

(Million euros)

Eligible capital resources	Eligible capital resources	
	2012	2011
Capital	2,670	2,403
Reserves <sup>(1)</sup>	39,067	35,208
Minority interests	2,025	1,375
Deductions	-10,778	-10,837
- Goodwill	-8,444	-8,507
- Treasury stock	-110	-300
- Other deductions	-2,223	-2,030
Net attrib. profit and interim and final Group dividends	335	2,170
Preferred securities and other eligible liabilities	3,074	5,189
Other deductions from Basic Capital and Additional Capital <sup>(2)</sup>	-2,636	-2,652
<b>BASIC CAPITAL (TIER I)</b>	<b>33,758</b>	<b>32,856</b>
Subordinated debt	1,852	3,871
Valuation adjustments in the AFS portfolio	0	173
Surplus on provisions	2,609	1,900
Other deductions from Basic Capital and Additional Capital <sup>(2)</sup>	-2,636	-2,652
<b>ADDITIONAL CAPITAL (TIER II)</b>	<b>1,825</b>	<b>3,292</b>
<b>TOTAL</b>	<b>35,583</b>	<b>36,148</b>
TIER I	10.25%	9.90%
TIER II	0.55%	0.99%
Total	10.80%	10.89%
RWA	329,416	332,040
Additional capital resources mixed group <sup>(3)</sup>	1,290	1,070
<b>Total including mixed group</b>	<b>36,872</b>	<b>37,218</b>

(1) Including share Premium.

(2) Mainly holdings in financial and insurance institutions are divided equally between Basic Capital and Additional Capital.

(3) Article 6 of Spanish Royal Decree 1332/2005, of 11 November, on the capital adequacy of financial groups and mixed group reporting.

The increase in basic capital (Tier 1) is basically due to the earnings for the period, combined with the currency effect, which has also contributed to the increased reserves.

In addition, the most significant changes in the components of basic capital can be explained by the inclusion of 2011 earnings in reserves and the conversion of convertible bonds into shares in 2012. This conversion increased capital by €194 million and the share premium (included under Reserves)

by €1,998 million. (See Note 27 of the Annual Consolidated Financial Statements). With respect to additional capital (Tier II), the reduction in the subordinated debt heading is basically due to the maturity of securities and the buy-back of subordinated debt by the Bank. (See Note 23.4 of the Annual Consolidated Financial Statements).

The table below shows the differences between the elements making up shareholders' equity and regulatory capital for solvency purposes:

## Other requirements on minimum capital levels

Irrespective of the aforementioned requirements, in 2011, the European Banking Authority (EBA) issued the recommendation of reaching, as of June 30, 2012, a new minimum capital level of 9%, in the ratio known as Core Tier I (CTI). In addition, this minimum ratio should have a sufficient excess amount to absorb the "sovereign buffer" calculated based on sovereign exposure. As of June 30, 2012, the BBVA Group's EBA Core Tier I capital stood at

9.9% (before taking into account the sovereign buffer), thus complying with the minimum required level. "The Bank of Spain endorsed these recommendations for Spanish institutions that participated in the EBA exercise, and extended the maintenance of this minimum recommended ratio beyond June 30, 2012. As of December 31, 2012, the BBVA Group continued to have an EBA Core Tier I ratio above the minimum required, at 9.7%.

(Million euros)

Reconciliation of shareholders' equity with regulatory capital	2012
Capital	2,670
Share premium	20,968
Reserves	19,734
Own shares in portfolio	-111
Attributed net income	1,676
Attributed dividend	-1,323
<b>Total shareholders' funds (public balance sheet)</b>	<b>43,614</b>
Valuation adjustments	-2,184
Minority interests	2,372
<b>Total equity (public balance sheet)</b>	<b>43,802</b>

<b>Total equity (public balance sheet)</b>	<b>43,802</b>
Goodwill and other intangible assets	-10,604
Shares and other eligible preferred securities	3,098
Non-distributed dividend	-257
Other adjustments	355
Other deductions from Basic Capital and Additional Capital	-2,636
<b>BASIC CAPITAL (TIER I)</b>	<b>33,758</b>

### 3. Information on capital requirements

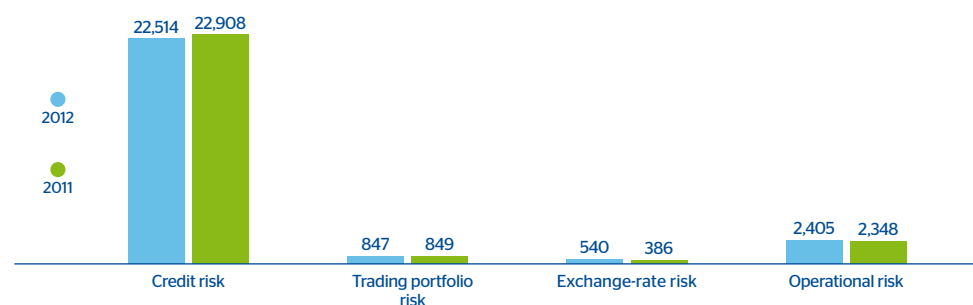
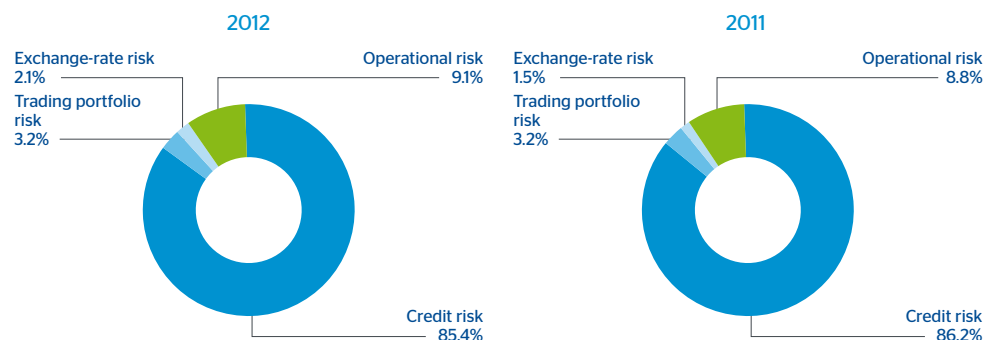
#### 3.1. A breakdown of minimum capital requirements by risk type

The accompanying table shows total capital requirements itemized by credit risk, trading-book risk, exchange rate risk,

operational risk and other requirements as of December 31, 2012 and 2011.

The total amount for credit risk includes the positions in securitizations (standardized and advanced approach) and equity portfolio.

##### Capital requirements by risk type



(Million euros)

Exposure categories and risk types	Capital amount	
	2012	2011
Central governments and central banks	1,229	709
Regional governments and local authorities	149	284
Public-sector institutions and other public entities	86	100
Multilateral development banks	2	0
Institutions	357	295
Corporates	5,190	5,216
Retail	2,420	2,137
Collateralized with real-estate property	1,663	1,588
Default status	694	639
High risk	155	210
Guaranteed bonds	8	1
Short-term to Institutions and Corporates	12	14
Mutual funds	4	17
Other exposures	1,039	942
Securitized positions	239	406
<b>TOTAL CREDIT RISK BY THE STANDARDIZED APPROACH</b>	<b>13,246</b>	<b>12,558</b>

(Continued)

(Continued)

Exposure categories and risk types	Capital amount	
	2012	2011
Central governments and central banks	17	45
Institutions	1,139	1,252
Corporates	5,135	6,139
Retail	2,060	2,153
<i>Secured by real-estate collateral</i>	<i>1,190</i>	<i>1,524</i>
<i>Qualifying revolving retail</i>	<i>598</i>	<i>489</i>
<i>Other retail assets</i>	<i>272</i>	<i>141</i>
Equity	795	706
By method:		
Simple Method	176	217
PD/LGD Method	497	371
Internal Models	122	118
By nature:		
Exchange-traded equity instruments	517	495
Non-trading equity instruments in sufficiently diversified portfolios	278	212
Securitized positions	122	53
<b>TOTAL CREDIT RISK BY THE ADVANCED MEASUREMENT APPROACH</b>	<b>9,268</b>	<b>10,350</b>
<b>TOTAL CREDIT RISK</b>	<b>22,514</b>	<b>22,908</b>
Standard:	155	161
Price Risk from fixed-income positions	119	106
Correlation risk	12	35
Price Risk from equity portfolios	23	20
Advanced: Market risk	693	688
<b>TOTAL TRADING-BOOK ACTIVITY RISK</b>	<b>847</b>	<b>849</b>
<b>EXCHANGE-RATE RISK (STANDARDIZED APPROACH)</b>	<b>540</b>	<b>386</b>
<b>OPERATIONAL RISK<sup>(1)</sup></b>	<b>2,405</b>	<b>2,348</b>
<b>OTHER CAPITAL REQUIREMENTS</b>	<b>47</b>	<b>71</b>
<b>CAPITAL REQUIREMENTS</b>	<b>26,353</b>	<b>26,562</b>

(1) See Chapter 6.

Capital requirements variation due to credit risk is affected by opposite movements, first reflects the reduction in assets of business in Spain in line with the process of deleveraging underway in the country's economy, and In contrast, lending in South America grew very significantly over the year due to the positive performance of economies in most of the countries in the region in which the Group operates. The appreciation of their currencies during this period also had an impact on the increase in risk-weighted assets.

The increase in the capital requirements for exchange-rate risk is due to increases in the non-hedged part of structural positions.

The amounts shown in the table above on credit risk include the counterparty

risk in trading-book activity as shown below:

(Million euros)

Counterparty risk trading-book activities	Capital amount	
	2012	2011
Standardized approach	205	214
Advanced measurement approach	481	749
<b>TOTAL</b>	<b>686</b>	<b>962</b>

The management of new netting and collateral agreements have reduced the capital requirements for counterparty risk.

The Group currently has no capital requirements for trading-book activity liquidation risk.



## 3.2. Procedure employed in the internal capital adequacy assessment process

The Group's budgeting process is where it makes the calculations both for economic capital at risk allocated by the different business areas and for the capital base. Economic capital is calculated by internal models that collect the historical data existing in the Group and calculate the capital necessary for pursuit of the activity adjusted for risks inherent to it. These calculations include additional risks to those contemplated in regulatory Pillar I.

The following points are assessed within the internal capital adequacy assessment process:

- The Group's risk profile: Measurement of the risks (credit, operational, market, liquidity and other asset and liability risks) and quantification of the capital necessary to cover them. The analysis and valuation of the Bank's risk profile is supported by a description of the current situation and

projections by type of risk described. The valuation is supported by both quantitative data and qualitative factors.

- Systems of risk governance, management and control: Review of the corporate risk management culture and Internal Audit. The BBVA Group has developed a system of corporate governance that is in line with the best international practices and adapted it to the requirements of the regulators in the country in which its different units operate.
- Capital resources target: Capital distribution between the Group's companies and the targets marked for it. The capital management policies designed to comply with these objectives include: regular estimates of capital needs; continuous management of the capital structure; and concentration of the capital surpluses in the Group's parent.

- Capital planning: A projection is made of the Group's capital base and that of the parent and its main subsidiaries for the next three years and capital sufficiency is analyzed at the end of the period. Furthermore, a stress test is performed using a scenario in which macroeconomic values are estimated for a global-level, economic recession scenario and the consequences of this on the Group's activity (increased NPA, lower activity levels, higher volatility in the financial markets, falls in the stock market, operating losses, liquidity crises, etc.) and its impact on the capital base (income, reserves, capacity to issue equity instruments, allowances, risk-weighted assets, etc.). Estimations are also made on the possible cyclical nature of the models used. The stress scenarios cover recession situations in sufficiently long periods (20-30 years). Finally, backtesting is carried out on the data presented for the previous year.

- Future action program: If the conclusions of the report so require, corrective actions are programmed that enable the Bank's equity situation to be optimized in view of the risks analyzed. The main programs for future action are focused on models of: credit risk, operational risk, market risk, real-estate risk and integration in management.

The internal capital adequacy assessment process concludes with a document which is sent annually to the Bank of Spain for supervision of the targets and the action plan presented, enabling a dialog to be set up between the Supervisor and the Group concerning capital and solvency.

# 4. Credit risk

## 4.1. Accounting definitions

### 4.1.1. Definitions of non-performing assets and impaired positions

Pursuant to the provisions of the Accounting Circular, the Group classifies its debt instruments under the heading of assets impaired by credit risk, both for the risk attributable to the customer and for country risk:

Customer risk includes:

- **Risks due to default:** This includes those debt instruments that have amounts due on principal, interest or any other cost agreed by contract, regardless of who the holder is or the guarantee involved, with a seasoning of more than 3 months, unless they involve write-offs, as well as those debt instruments that are classified as non-performing through the accumulation of balances rated as non-performing through default for an amount exceeding 25% of the overall sums pending collection.
- **For reasons other than default:** This includes those debt instruments for which there is no concurrence of the circumstances required to classify them as write-offs or non-performing for

reasons of default, and which generate doubt regarding their full reimbursement (principal and interest) under the terms and conditions agreed by contract.

- **Country risk:** The assets impaired for reasons of country risk will be the debt instruments of operations in countries with long-standing difficulties in servicing their debt, with there being doubt cast on the possibility of recovery, with the exception of those excluded from provisioning for country risk (e.g., risks attributed to a country, regardless of the currency in which they are denominated, registered in subsidiaries located in the holder's country of residence, commercial loans with a due date not exceeding one year, etc.) and those that are to be classified as non-performing or write-offs for risk attributable to the customer.

Those operations for which there is a concurrence of reasons for classifying a transaction as credit risk, both for risk attributable to the customer and for country risk, are to be classified under the heading corresponding to risk attributable to the customer, unless it corresponds to a worse category for country risk, without prejudice to the fact that impairment losses attributable to customer risk are covered under the item

of country risk when it involves a greater requirement.

Write-off risks are those debt instruments, due or otherwise, for which an individualized analysis has concluded that their recovery is deemed remote and that they should be classified as final write-offs.

### 4.1.2. Methods for determining value adjustments for impairment of assets and provisions

#### 4.1.2.1. Methods used for determining value adjustments for impairment of assets

The impairment on financial assets is calculated by type of instrument and other circumstances that may affect it, taking into account the guarantees received by the holders of the instruments to assure (fully or partially) the performance of the transactions. The BBVA Group recognizes impairment charges directly against the impaired asset when the likelihood of recovery is deemed remote, and uses an offsetting or allowance account when it records provisions made to cover estimated losses on their full value.

The amount of the deterioration of debt instruments valued at their amortized cost is calculated by whether the impairment losses are determined individually or collectively.

#### Impairment losses determined individually

The amount of impairment losses recorded by these instruments coincides with the positive difference between their respective book values and the present values of future cash flows. These cash flows are discounted at the instrument's original effective interest rate. If a financial instrument has a variable interest rate, the discount rate for measuring any impairment loss is the current effective rate determined under the contract.

As an exception to the rule described above, the market value of quoted debt instruments is deemed to be a fair estimate of the present value of their future cash flows. The estimation of future cash flows for debt instruments considers the following:

- All sums expected to be recovered during the remaining life of the instrument including those that may arise from collaterals and credit enhancements, if any, (once deduction has been made of the costs required for their foreclosure

and subsequent sale). Impairment losses include an estimate of the possibility of collecting of the accrued, past-due and uncollected interest.

- The various types of risk to which each instrument is subject.
- The circumstances under which the collections will foreseeably take place.

With respect to impairment losses resulting from the materialization of insolvency risk of the obligors (credit risk), a debt instrument is impaired when:

- There is evidence of a reduction in the obligor's capacity to pay, whether manifestly by default or for other reasons; and/or
- Country-risk materializes, understood as the common risk among debtors who are resident in a particular country as a result of factors other than normal commercial risk, such as sovereign risk, transfer risk or risks derived from international financial activity.

The BBVA Group has developed policies, methods and procedures to calculate the losses that it may incur as a result of its credit risks, whether attributable to the insolvency of counterparties or to country risk. These policies, methods and procedures are applied to the arrangement, study and documentation of debt instruments, risks and contingent commitments, as well as the detection of their deterioration and in the calculation of the amounts needed to cover their credit risk.

#### Impairment losses determined collectively

The collectively determined losses are calculated by using statistical procedures, and they are deemed equivalent to the portion of losses incurred on the date that the accompanying consolidated financial statements are prepared that has yet to be allocated to specific transactions.

The BBVA Group uses the concept of expected loss to quantify the cost of the credit risk and include it in the calculation of the risk-adjusted return of its transactions. The parameters necessary for its calculation are also used to calculate economic capital and to calculate BIS II regulatory capital under internal models.

These models allow us to estimate the expected loss of the credit risk of each portfolio, in the one-year period after the reporting date, considering the characteristics of the counterparty and the guarantees and collateral associated with the transactions. The expected loss is calculated taking into account three factors: exposure at default, probability of default and loss given default. (See Note 4.5.1.7)

- Exposure at default (EAD) is the amount of risk exposure at the date of default by the counterparty.
- Probability of default (PD) is the probability of the counterparty failing to meet its principal and/or interest payment obligations. The probability of default is associated with the rating/scoring of each counterparty/transaction. PD is measured using a time horizon of one

year; i.e. it quantifies the probability of the counterparty defaulting within the coming year. Default is defined as amounts past due by 90 days or more, or cases in which there is no default but there are doubts as to the solvency of the counterparty (subjective doubtful assets).

- Loss given default (LGD) is the loss arising in the event of default. It depends mainly on the guarantees associated with the transaction.

To calculate the LGD at each date in the balance sheet, the cash flows from the sale of collateral are estimated by calculating its sale price (in the case of real-estate collateral, the reduction it may have suffered in value is taken into account) and its cost.

The calculation of the expected loss used to determine economic capital in our internal models includes through-the-cycle adjustments of the factors mentioned above, in particular of the PD and LGD. These adjustments aim to establish the average level in the economic cycle of the value of the parameters used in our models. The Group considers that this makes the calculation of economic capital more stable and precise. However, the provisions for credit risk are calculated taking as a base the estimated losses incurred at the date of presentation (without any "through-the-cycle" adjustments), in accordance with IFRS criteria.

By using this method of establishing the loss provisions determined collectively, the Group aims to identify the amount of losses that it knows have been produced at the close of

the year, even though they have not been identified, given historical experience and other specific information; the losses will become clear after the date the information is presented.

To calculate these unidentified incurred losses, adjustments are made to the expected loss used to calculate the economic capital under our internal models, eliminating the through the cycle loss and focusing on the loss incurred (instead of the expected loss), as required by the IFRS. These adjustments are based on the following two parameters:

- The point-in-time parameter, which is an adjustment to eliminate the through-the-cycle component of the expected loss. The point in time parameter converts the through-the-cycle probability of default (defined as the average probability of default in a complete economic cycle) into the probability of default at a given point in time.
- The loss identification period (LIP) parameter is the period between the time at which the event occurs that generates a given loss and the time when the loss becomes known at an individual level; in other words, the time between the occurrence of the event and the date when the entity identifies it.

This adjustment is related to the fact that when the expected loss is calculated for economic capital and BIS II regulatory capital, the probability of default is measured for a time horizon of one year. Therefore, to calculate the provisions for credit risk,

the expected loss at one year has to be converted into the concept of loss incurred at the year-end in accordance with IAS 39. The Group calculates the loss incurred at the year-end by adjusting the expected loss for the next 12 months according to the estimated LIPs for the different uniform portfolios.

The analysis of the LIPs is carried out on the basis of a uniform portfolio. The following methodology is used to determine the LIP interval that has taken place:

- Analysis of the frequency of regulatory and internal review: A review of the asset quality of customers allows the occurrence of losses to be identified. The more frequently the asset quality of customers is analyzed, the quicker are the losses identified and the lower the resulting LIP (the losses incurred and not reported fall, but the losses incurred and identified increase). Conversely, the lower the frequency of review of customer asset quality, the slower identification of losses, which means a higher LIP.
- Analysis of the correlation between macroeconomic factors and the probability of default: The deterioration of macroeconomic variables may be considered as a loss event if it means an increase in the credit risk of a portfolio. Analysis carried out by the Group shows the correlation between various macroeconomic variables and the probability of default, with a delay between the changes in the variables and the default rate.

- As a reference, the LIPs of our European competitors are: for corporate loans, between 3 and 12 months; and for retail loans, between 2 and 9 months.

However, the Bank of Spain requires that the allowance for losses incurred must also comply with Circular 4/2004.

#### **4.1.2.2. Methods used for provisioning for contingent exposures and commitments**

Non-performing contingent exposures and commitments, except for letters of credit and other guarantees, are to be provisioned for an amount equal to the estimation of the sums expected to be disbursed that are deemed to be non-recoverable, applying criteria of valuation prudence. When calculating the provisions criteria similar to those established for non-performing assets for reasons other than customer default are applied.

Nonetheless, those letters of credit and other guarantees provided and classified as non-performing are to be covered at least by the coverage percentages specified for non-performing assets.

Likewise, the inherent loss associated with letters of credit and other guarantees provided that are in force and not impaired is covered by applying similar criteria to those set out in the preceding section on impairment losses determined collectively.

#### **4.1.3. Criteria for removing or maintaining assets subject to securitization on the balance sheet**

The accounting procedure for the transfer of financial assets depends on the manner in which the risks and benefits associated with securitized assets are transferred to third parties.

Financial assets are only removed from the consolidated balance sheet when the cash flows they generate have dried up or when their implicit risks and benefits have been substantially transferred out to third parties.

Group is considered to substantially transfer the risks and benefits when these account for the majority of the overall risks and benefits of the securitized assets.

When the risks and benefits of transferred assets are substantially conveyed to third parties, the financial asset transferred is removed from the consolidated balance sheet, and any right or obligation retained or created as a result of the transfer is simultaneously recognized.

In many situations, it is clear whether the entity has substantially transferred all the risks and benefits associated with the transfer of an asset. However, when it is not sufficiently clear if the transfer took place or not, the entity evaluates its exposure before and after the transfer by comparing the variation in the amounts and the calendar of the net cash flows of the transferred asset. Therefore, if the exposure to the variation in

the current value of the net cash flows of the financial asset does not significantly change as a result of the transfer, then the entity has not substantially transferred all the risks and benefits associated with the ownership of the asset.

When the risks and/or benefits associated with the financial asset transferred are substantially retained, the asset transferred is not removed from the consolidated balance sheet and continues to be valued according to the same criteria applied prior to the transfer.

In the specific case of the SSPEs (Securitization Special Purpose Entities) to which Group institutions transfer their loan-books, the following control guidelines are to be considered with a view to analyzing their possible consolidation:

- The activities of SSPEs are pursued on the Group's behalf in accordance with its specific business requirements, whereby it will obtain benefits or advantages from these activities.
- The Group retains decision-making powers in order to obtain the greater part of the benefits from the activities of SSPEs or has delegated such powers through an "auto-pilot" mechanism (SSPEs are structured in such a way that all their decisions and activities will already have been defined at the time of their creation).
- The Group is entitled to obtain the greater part of the benefits from SSPEs

and is therefore exposed to the risks forthcoming from their business.

- The Group withholds the greater part of the residual benefits from SSPEs.
- The Group retains ulk greater part of the securitization funds' asset risks.

If there is control based on the preceding guidelines, the SSPEs are consolidated with the Group.

#### 4.1.4. Criteria for the recognition of earnings in the event of the removal of assets from the balance sheet

In order for the Group to recognize the result of the sale of financial instruments, the sale has to involve the corresponding removal from the accounts, which requires the fulfillment of the requirements governing the substantial transfer of risks and benefits as described in the preceding point. The result will be

reflected on the income statement, and calculated as the difference between the book value and the net value received including any new additional assets obtained minus any liabilities assumed.

When the amount of the financial asset transferred coincides with the total amount of the original financial asset, the new financial assets, financial liabilities and liabilities for the provision of services, as appropriate, that are generated as a result of the transfer will be recorded according to their fair value.

#### 4.1.5. Key hypothesis for valuing risks and benefits retained on securitized assets

The Group considers that a substantial withholding is made of the risks and benefits of securitizations when the subordinated bonds of issues are kept and/or it grants subordinated debt to the securitization funds that mean substantially retaining the credit losses expected from the loans transferred.

The Group only has traditional securitizations and no synthetic securitizations.

## 4.2. Information on credit risks

### 4.2.1. Exposure to credit risk

Pursuant to Rule Thirteen in the Solvency Circular concerning the capital requirements for credit risk, exposure is understood to be any asset item and all items included in the Group's memorandum accounts involving credit risk and not deducted from the Group's eligible capital. Accordingly, inclusion is made mainly of customer lending items, with their corresponding undrawn balances, letters of credit and guarantees, debt securities and capital instruments, cash and deposits in central banks and credit institutions, assets purchased or sold under a repurchase agreement (asset and liability repos), financial derivatives and fixed assets.

Below is a presentation of the original exposure and the allowances for losts under the advanced measurement and standardized approaches as of December 31, 2012 and 2011. In accordance with section one of Rule Twenty-eight of the Solvency Circular, only the exposure net of allowances is presented for those exposures calculated under the standardized approach.

In the comparison between the two exercises there can be seen to be a growth in credit risk exposures calculated by the standard method. This is basically due to the entry of Unnim into the Group's portfolio and the increased lending activity in the Group's subsidiaries in Latin America:

- The original exposure to central and regional government and other public-sector authorities falls due to lower volumes in repos.
- Exposure to companies increases due to the incorporation of the Unnim loan book into the Group's portfolio and the increased activity in this segment in the Latin American subsidiaries of Mexico, Venezuela and Chile.
- In the case of retail exposure, the growth in the original exposure is once more explained by Unnim, with €3 billion, and the growth of business in the Latin American subsidiaries.

- The increased exposure in the category of real-estate collateralized loans is due to a combination of two effects: the Unnim portfolio (€10.5 billion) and a fall by a transfer of part of the portfolio of Spain to internal models.
- The increased exposure to default corresponds basically to Unnim.

With respect to exposure by credit risk calculated using internal models, the categories of Institutions and Corporates is reduced by the deleveraging in the Spanish market mentioned above.

The increase in the retail categories is due basically to the transfer to internal consumer, credit card and mortgage models.

Category of exposure	Original exposure <sup>(1)</sup>	Provisions <sup>(2)</sup>	Exposure net of provisions <sup>(3)</sup>
Central governments and central banks	108,378	-193	108,185
Regional governments and local authorities	9,361	0	9,361
Public-sector institutions and other public entities	3,096	-1	3,095
Multilateral development banks	187	0	187
International organizations	34	0	34
Institutions	18,855	-12	18,843
Corporates	98,219	-1,686	96,533
Retail	55,783	-195	55,589
Collateralized with real-estate property	54,193	-169	54,024
Default status	11,489	-2,581	8,908
High risk	1,596	-73	1,523
Guaranteed bonds	503	0	503
Short-term to institutions and corporates	656	0	656
Mutual funds	53	0	53
Other exposures	23,081	-7	23,074
<b>TOTAL STANDARDIZED APPROACH</b>	<b>385,483</b>	<b>-4,916</b>	<b>380,567</b>
Central governments and central banks	1,092	-2	
Institutions	77,129	-53	
Corporates	133,851	-6,284	
Retail	94,022	-1,501	
<i>Secured by real-estate collateral</i>	<i>70,970</i>	<i>-445</i>	
<i>Qualifying revolving retail</i>	<i>16,415</i>	<i>-622</i>	
<i>Other retail assets</i>	<i>6,636</i>	<i>-434</i>	
<b>TOTAL ADVANCED MEASUREMENT APPROACH</b>	<b>306,095</b>	<b>-7,841</b>	
<b>SUBTOTAL CREDIT RISK (securitizations and equity positions not included)</b>	<b>691,577</b>	<b>-12,757</b>	
Securitized positions	9,409	-177	
Standardized Approach	6,685	-47	6,637
Advanced Measurement Approach	2,724	-130	
Equity	6,234	-225	
Simple Method	947	-66	
Non-trading equity instruments in sufficiently diversified portfolios	694	-64	
Exchange-traded equity instruments	253	-2	
PD/LGD Method	4,798	0	
Internal Models	489	-159	
<b>TOTAL CREDIT RISK</b>	<b>707,220</b>	<b>-13,160</b>	

Exposure after applying conversion factors				
On-balance-sheet exposure after mitigation techniques	Off-balance-sheet exposure after mitigation techniques	Fully adjusted value of the exposure	Average CCF	EAD
97,958	3,197	101,155	73%	100,299
6,775	255	7,030	43%	6,884
2,990	1,365	4,355	40%	3,539
67	133	200	12%	83
34	0	34	1%	34
12,799	5,937	18,736	16%	13,761
56,930	33,486	90,417	31%	67,341
38,875	13,778	52,653	11%	40,345
51,164	45	51,209	23%	51,174
8,014	55	8,069	61%	8,048
1,327	37	1,364	22%	1,335
503	0	503	0%	503
645	0	645	0%	645
24	28	52	100%	52
27,350	489	27,838	31%	27,502
<b>305,457</b>	<b>58,804</b>	<b>364,261</b>	<b>-</b>	<b>321,544</b>
1,947	859	2,805	51%	2,382
71,686	5,882	77,568	60%	75,187
75,084	56,583	131,668	55%	106,014
83,895	10,159	94,054	27%	86,653
<i>70,590</i>	<i>380</i>	<i>70,970</i>	<i>10%</i>	<i>70,630</i>
<i>6,742</i>	<i>9,674</i>	<i>16,415</i>	<i>28%</i>	<i>9,427</i>
<i>6,563</i>	<i>105</i>	<i>6,668</i>	<i>32%</i>	<i>6,596</i>
<b>232,611</b>	<b>73,483</b>	<b>306,095</b>	<b>-</b>	<b>270,237</b>
<b>538,069</b>	<b>132,287</b>	<b>670,356</b>	<b>-</b>	<b>591,781</b>
9,361	-	9,361	-	9,277
6,637	-	6,637	-	6,553
2,724	-	2,724	-	2,724
5,744	-	5,744	-	6,234
947	-	947	-	947
694	-	694	-	694
253	-	253	-	253
4,798	-	4,798	-	4,798
0	-	0	-	489
<b>553,174</b>	<b>132,287</b>	<b>685,462</b>	<b>-</b>	<b>607,292</b>

(1) Gross exposure prior to the application of risk mitigation techniques.

(2) It includes provisions for the impairment of assets (financial and non-financial) and other valuation adjustments, with the exception of the generic provision included in the capital base as more Additional Capital, as per Rule Eight in the Solvency Circular.

(3) Exposures are adjusted solely by provisions in the case of exposures by the Standardized Approach.

Category of exposure	Original exposure <sup>(1)</sup>	Provisions <sup>(2)</sup>	Exposure net of provisions <sup>(3)</sup>	Exposure after applying conversion factors				
				On-balance-sheet exposure after mitigation techniques	Off-balance-sheet exposure after mitigation techniques	Fully adjusted value of the exposure	Average CCF	EAD
Central governments and central banks	112,419	-11	112,408	79,807	3,532	83,339	70%	82,274
Regional governments and local authorities	12,128	0	12,128	7,117	3,061	10,178	63%	9,044
Public-sector institutions and other public entities	4,115	0	4,114	3,218	807	4,025	49%	3,613
Multilateral development banks	39	-	39	34	22	55	0%	34
International organizations	12	0	12	12	0	12	0%	12
Institutions	16,293	-24	16,269	12,278	4,198	16,476	18%	13,014
Corporates	92,579	-1,576	91,003	57,107	30,261	87,368	41%	69,518
Retail	48,151	-287	47,864	33,445	13,312	46,757	16%	35,618
Collateralized with real-estate property	45,300	-111	45,189	43,680	211	43,891	49%	43,784
Default status	8,632	-1,175	7,457	7,395	7	7,402	59%	7,399
High risk	1,874	-42	1,833	1,754	55	1,809	48%	1,781
Guaranteed bonds	78	0	78	78	0	78	0%	78
Short-term to institutions and corporates	895	0	895	895	0	895	0%	895
Mutual funds	216	0	216	164	52	216	99%	215
Other exposures	20,522	-12	20,510	26,208	788	26,997	70%	26,763
<b>TOTAL STANDARDIZED APPROACH</b>	<b>363,252</b>	<b>-3,237</b>	<b>360,015</b>	<b>273,192</b>	<b>56,306</b>	<b>329,497</b>	<b>-</b>	<b>294,042</b>
Central governments and central banks	1,909	-4		2,755	993	3,748	48%	3,228
Institutions	98,320	-44		91,098	7,674	98,772	56%	95,412
Corporates	156,313	-3,356		91,360	62,661	154,021	52%	123,761
Retail	82,430	-1,059		76,550	5,880	82,430	33%	78,512
<i>Secured by real-estate collateral</i>	<i>68,859</i>	<i>-392</i>		<i>68,643</i>	<i>217</i>	<i>68,859</i>	<i>12%</i>	<i>68,668</i>
<i>Qualifying revolving retail</i>	<i>10,374</i>	<i>-536</i>		<i>4,711</i>	<i>5,663</i>	<i>10,374</i>	<i>34%</i>	<i>6,648</i>
<i>Other retail assets</i>	<i>3,196</i>	<i>-131</i>		<i>3,196</i>	<i>0</i>	<i>3,196</i>	<i>100%</i>	<i>3,196</i>
<b>TOTAL ADVANCED MEASUREMENT APPROACH</b>	<b>338,972</b>	<b>-4,464</b>		<b>261,763</b>	<b>77,208</b>	<b>338,972</b>	<b>-</b>	<b>300,913</b>
<b>SUBTOTAL CREDIT RISK (securitizations and equity positions not included)</b>	<b>702,224</b>	<b>-7,701</b>		<b>534,955</b>	<b>133,514</b>	<b>668,469</b>	<b>-</b>	<b>594,954</b>
Securitized positions	8,396	-255		8,264	-	8,264	-	8,264
Standardized Approach	6,351	-131	6,220	6,220	-	6,220	-	6,220
Advanced Measurement Approach	2,045	-123		2,045	-	2,045	-	2,045
Equity	6,426	-433		5,946	-	5,946	-	6,426
Simple Method	1,216	-314		1,216	-	1,216	-	1,216
Non-trading equity instruments in sufficiently diversified portfolios	610	-27		610	-	610	-	610
Exchange-traded equity instruments	606	-287		606	-	606	-	606
PD/LGD Method	4,730	-2		4,730	-	4,730	-	4,730
Internal Models	480	-117		0	-	0	-	480
<b>TOTAL CREDIT RISK</b>	<b>717,045</b>	<b>-8,389</b>		<b>549,165</b>	<b>133,514</b>	<b>682,679</b>	<b>-</b>	<b>609,644</b>

(1) Gross exposure prior to the application of risk mitigation techniques.

(2) It includes provisions for the impairment of assets (financial and non-financial) and other valuation adjustments, with the exception of the generic provision included in the capital base as more Additional Capital, as per Rule Eight in the Solvency Circular.

(3) Exposures are adjusted solely by provisions in the case of exposures by the Standardized Approach.

## 4.2.2. Average value of the exposures throughout 2012 and 2011

(Million euros)

Category of exposure	Original average exposure for the period	
	2012	2011
Central governments and central banks	107,063	105,229
Regional governments and local authorities	9,034	8,811
Public-sector institutions and other public entities	2,967	4,162
Multilateral development banks	82	45
International organizations	396	12
Institutions	19,396	16,483
Corporates	96,500	84,920
Retail	55,665	46,872
Collateralized with real-estate property	49,547	46,236
Default status	9,978	8,714
High risk	1,749	1,967
Guaranteed bonds	361	34
Short-term to institutions and corporates	757	694
Mutual funds	140	138
Other exposures	21,852	17,870
<b>TOTAL STANDARDIZED APPROACH</b>	<b>375,485</b>	<b>342,188</b>
Central governments and central banks	1,515	3,059
Institutions	91,627	96,325
Corporates	143,931	157,715
Retail	92,077	82,726
<i>Secured by real-estate collateral</i>	70,933	69,324
<i>Qualifying revolving retail</i>	15,119	10,109
<i>Other retail assets</i>	6,024	3,294
<b>TOTAL ADVANCED MEASUREMENT APPROACH</b>	<b>329,149</b>	<b>339,826</b>
<b>SUBTOTAL CREDIT RISK (securitizations and equity positions not included)</b>	<b>704,633</b>	<b>682,014</b>
Securitized positions	9,073	8,234
Standardized Approach	6,603	6,063
Advanced Measurement Approach	2,469	2,171
Equity	6,069	6,875
Simple Method	1,068	1,294
Non-trading equity instruments in sufficiently diversified portfolios	649	787
Exchange-traded equity instruments	419	507
PD/LGD Method	4,526	5,054
Internal Models	475	527
<b>TOTAL CREDIT RISK</b>	<b>719,776</b>	<b>697,122</b>

## 4.2.3. Distribution by geographical area

The following chart present the distribution by significant geographic areas of the original exposure by country pursuant to the obligor's country. The breakdown includes exposure under the standardized and advanced measurement approaches, without including positions or equity.

### 2012

(Million euros)

Category of exposure	Total	Original exposure by geographical area				
		Europe	Mexico	U.S.	South America	Rest of the World
Central governments and central banks	108,378	72,769	12,857	5,732	17,000	20
Regional governments and local authorities	9,361	1,752	6,387	968	189	65
Public-sector institutions and other public entities	3,096	1,337	0	269	1,490	0
Institutions	18,855	9,019	2,522	89	7,127	98
Corporates	98,219	20,409	18,244	35,990	23,111	465
Retail	55,783	19,075	7,020	6,214	23,450	25
Collateralized with real-estate property	54,193	19,618	10,795	12,379	11,397	4
Securitized positions	6,685	1,824	82	4,779	0	0
Other exposures	37,598	19,896	7,847	2,821	6,916	117
<b>TOTAL CREDIT RISK BY THE STANDARDIZED APPROACH</b>	<b>392,168</b>	<b>165,698</b>	<b>65,756</b>	<b>69,240</b>	<b>90,679</b>	<b>794</b>
Central governments and central banks	1,092	40	3	218	552	280
Institutions	77,129	71,030	19	3,827	310	1,944
Corporates	133,851	116,677	1,260	8,203	3,130	4,581
Retail	94,022	81,271	12,604	18	40	89
Securitized positions	2,724	2,674	0	13	0	38
<b>TOTAL CREDIT RISK BY THE ADVANCED MEASUREMENT APPROACH</b>	<b>308,819</b>	<b>271,692</b>	<b>13,885</b>	<b>12,279</b>	<b>4,032</b>	<b>6,931</b>
<b>TOTAL CREDIT RISK</b>	<b>700,986</b>	<b>437,390</b>	<b>79,641</b>	<b>81,520</b>	<b>94,711</b>	<b>7,725</b>

Note: Equity positions are not included.



The next table shows the distribution by geographical area of the book balances of the non-performing and impaired exposures for financial and non-financial assets and for contingent liabilities.

## 2012

(Million euros)

	Total	Europe	Mexico	U.S. and Puerto Rico	South America	Rest of the World
Non-performing and impaired exposures	19,824	17,017	1,315	834	634	25

Note: Accounting balances solvency perimeter. Equity positions are not included.

The next table shows the distribution by geographical area of the book balances of the allowances for financial asset losses and for contingent liabilities.

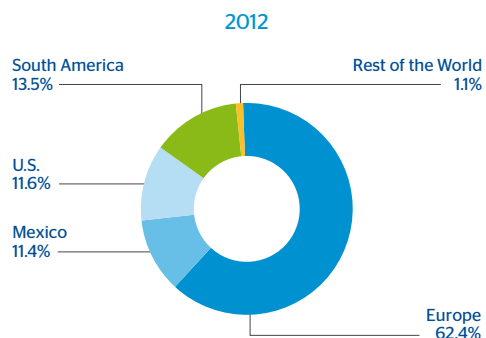
## 2012

(Million euros)

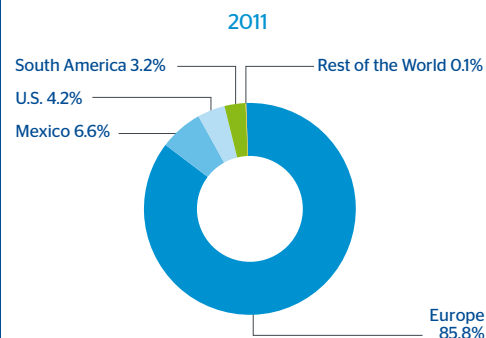
	Total	Europe	Mexico	U.S. and Puerto Rico	South America	Rest of the World
Value adjustments and provisions	14,917	10,766	1,683	924	1,505	39

Note: Accounting balances solvency perimeter. Equity positions are not included.

### Original exposure by geographical area



### Impaired and past due exposure by geographical area



## 4.2.4. Distribution by sector

The following table shows the distribution by economic sector (standardized and advanced measurement approaches) of the original exposure. The breakdown does not include positions in equity.

## 2012

(Million euros)

Category of exposure	Original exposure by sector							
	Total	EECC, Insurance and Financial Brokerage	Public sector	Agriculture	Industry	Construction	Commercial	Individuals and Other sectors
Central governments and central banks	108,378	15.5%						
Regional governments and local authorities	9,361	1.3%						
Public-sector institutions and other public entities	3,096	0.4%						
Institutions	18,855	2.7%						
Corporates	98,219	0.9%		0.5%	1.8%	1.2%	5.9%	2.5%
Retail	55,783	0.1%		0.1%	0.4%	0.2%	0.9%	5.2%
Collateralized with real-estate property	54,193			0.1%	0.1%	0.9%	0.4%	5.0%
Securitized positions	6,685	0.3%	0.5%				0.2%	
Other exposures	37,598	0.4%		0.1%	0.2%	0.3%	0.3%	0.8%

TOTAL CREDIT RISK BY THE STANDARDIZED APPROACH	392,168	4.3%	17.8%	0.7%	2.5%	2.7%	7.6%	10.9%	6.6%
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Central governments and central banks	1,092	0.2%							
Institutions	77,129	7.4%	3.6%						
Corporates	133,851	2.1%	0.6%	0.1%	6.8%	2.0%	2.1%	0.0%	3.3%
Retail	94,022							13.4%	
Securitized positions	2,724	0.4%							

TOTAL CREDIT RISK BY THE ADVANCED MEASUREMENT APPROACH	308,819	9.9%	4.3%	0.1%	6.8%	2.0%	2.1%	13.4%	3.4%
TOTAL CREDIT RISK	700,986	14.2%	22.2%	0.8%	9.3%	4.8%	9.7%	24.3%	9.9%

Note: Equity positions are not included.

The following table shows the distribution by counterparty of the book balances of the non-performing and impaired exposures of financial assets and contingent liabilities.

## 2012

(Million euros)

	Total	EECC, Insurance and Financial Brokerage	Public sector	Corporates	Retail	Other sectors
Non-performing and impaired exposures	19,824	1.8%	1.0%	62.2%	26.3%	8.7%

Note: Accounting balances solvency perimeter. Equity positions are not included.

The next table shows the distribution by counterparty of the book balances of allowances for financial asset losses and for contingent exposures:

## 2012

(Million euros)

	Total	EECC, Insurance and Financial Brokerage	Public sector	Corporates	Retail	Other sectors
Specific value adjustments	9,830	1.8%	0.8%	68.5%	21.7%	7.2%
Generic provisions	5,047					
Country risk	40					
<b>Value adjustments and provisions, total</b>	<b>14,917</b>					

Note: Accounting balances solvency perimeter. Equity positions are not included.

## 4.2.5. Distribution by residual maturity

The following table presents the distribution of original exposure by residual maturity, broken down by category of exposure under the standardized and advanced measurement approaches:

## 2012

(Million euros)

Category of exposure	Total	Original exposure by residual maturity		
		Less than 1 year	Between 1 and 5 years	Over 5 years
Central governments and central banks	108,378	68,441	25,664	14,273
Regional governments and local authorities	9,361	2,163	1,385	5,813
Public-sector institutions and other public entities	3,096	1,674	880	542
Institutions	18,855	9,625	5,263	3,967
Corporates	98,219	37,817	36,889	23,513
Retail	55,783	21,417	20,565	13,802
Collateralized with real-estate property	54,193	5,588	14,870	33,735
Securitized positions	6,685	133	1,303	5,249
Other exposures <sup>(1)</sup>	37,598	19,067	8,968	9,562
<b>TOTAL CREDIT RISK BY THE STANDARDIZED APPROACH</b>	<b>392,167</b>	<b>165,925</b>	<b>115,786</b>	<b>110,455</b>
Central governments and central banks	1,092	174	311	607
Institutions	77,129	37,894	19,022	20,213
Corporates	133,851	61,948	38,989	32,914
Retail	94,022	696	4,224	89,102
Securitized positions	2,724	63	490	2,171
<b>TOTAL CREDIT RISK BY THE ADVANCED MEASUREMENT APPROACH</b>	<b>308,819</b>	<b>100,775</b>	<b>63,036</b>	<b>145,007</b>
<b>TOTAL CREDIT RISK <sup>(2)</sup></b>	<b>700,986</b>	<b>266,701</b>	<b>178,822</b>	<b>255,463</b>

(1) Other exposures includes mainly cash (under 1 year) and fixed assets (over 5 years).

(2) Equity Positions are not included.

#### 4.2.6. Value adjustments for impairment losses and allowances for contingent risks and commitments

The following table presents the movement recorded in the years 2012 and 2011 in the allowance for impairment losses of financial assets on the balance sheet and for contingent liabilities and commitments, including country risk, generic and specific allowances.

##### 2012 (Million euros)

Item	Financial assets value adjustments and provisions	Provisions for Contingent Liabilities and Commitments	Total
<b>BALANCE AT START OF 2011</b>	10,039	291	10,330
Increase in impairment charged to income	10,643	105	10,747
Decrease in impairment credited to income	-2,333	-44	-2,377
Institutions acquired by the Group during the year	2,067	5	2,072
Institutions disposed of during the year	0	0	0
Transfers to written-off loans	-4,143	0	-4,143
Exchange differences and other transactions	-1,471	-16	-1,487
<b>BALANCE AT END OF YEAR 2012</b>	<b>14,801</b>	<b>341</b>	<b>15,142</b>
For impaired portfolio	9,889	166	10,055
For current non-impaired portfolio	4,912	175	5,087

Note: Solvency perimeter.

##### 2011 (Million euros)

Item	Financial assets value adjustments and provisions	Provisions for Contingent Liabilities and Commitments	Total
<b>BALANCE AT START OF 2010</b>	10,093	264	10,357
Increase in impairment charged to income	6,103	17	6,120
Decrease in impairment credited to income	-1,551	-24	-1,574
Institutions acquired by the Group during the year	305	12	317
Institutions disposed of during the year	0	0	0
Transfers to written-off loans	-4,114	0	-4,114
Exchange differences and other transactions	-797	22	-775
<b>BALANCE AT END OF YEAR 2011</b>	<b>10,039</b>	<b>291</b>	<b>10,330</b>
For impaired portfolio	6,903	135	7,038
For current non-impaired portfolio	3,105	157	3,262

Note: Solvency perimeter.

#### 4.2.7. Total impairment losses for the period

The following table shows details of impairment losses and allowances on financial assets and contingent risks and commitments, as well as derecognition of losses previously recognized in asset write-offs recorded directly in the income statement in 2012 and 2011.

(Million euros)

Items	2012	2011
Financial assets	7,980	4,226
Of which:		
Recovery of written-off assets	337	327
Contingent exposure and commitments [recoveries (-)]	61	-6
<b>TOTAL IMPAIRMENT LOSSES</b>	<b>8,041</b>	<b>4,220</b>

Note: Solvency perimeter.

## 4.3. Information on counterparty risk

Counterparty exposure involves that part of the original exposure corresponding to derivative instruments, repurchase and resale transactions, securities or commodities lending or borrowing transactions and deferred settlement transactions.

### 4.3.1. Policies on managing counterparty risk

#### 4.3.1.1. Methodology: allocation of internal capital and limits to exposures subject to counterparty risk

The Group has an economic model for calculating internal capital through exposure to counterparty risk in treasury operations. This model has been implemented in the Risk unit systems in Market areas. It is used to measure the credit exposures for each of the counterparties for which the entity operates.

The generation of exposures is undertaken in a manner that is consistent with those used for the monitoring and control of credit risk limits. The time horizon is divided up into intervals, and the market risk factors (interest rates, exchange rates, etc.) underlying the instruments that determine their valuation are simulated for each interval. The exposures are generated from 500 different scenarios using the Monte Carlo method for risk factors (subject to counterparty risk) and

applying the corresponding mitigations to each counterparty (in other words, applying collateral and/or netting agreements as applicable).

The correlations, loss given defaults, internal ratings and associated probabilities of default are consistent with the Group's economic model for general credit risk.

The capital for each counterparty is then calculated using the exposure profile and taking into account the analytical formula adopted by Basel. This figure is modified by an adjustment factor for the possible maturity subsequent to one year of the operations in a similar vein to the general approach adopted by Basel for the treatment of credit risk.

Counterparty limits are specified within the financial programs authorized for each subsidiary within the line item of treasury limits. It stipulates both the limit and the maximum term for the operation. The use of transactions within the limits is measured in terms of mark-to-market valuation plus the potential risk with Monte Carlo Simulation methodology (95% confidence level) and bearing in mind possible mitigating factors (such as netting, break clauses or collateral contracts).

Management of consumption by lines in the Markets area is carried out through a corporate platform that enables online

monitoring of the limits and availabilities established for the different counterparties and clients. This control is completed by independent units of the business area to guarantee proper segregation of functions.

#### 4.3.1.2. Policies for ensuring the effectiveness of collaterals and establishing the value adjustments for impairment to cover this risk

The Group has concluded collateral contracts with many of its counterparties that serve as a guarantee of the mark-to-market valuation of derivatives operations. The collateral consists mostly of deposits, which means that no situations of impairment are forthcoming.

A tool has been specifically designed to process and manage the collateral contracts concluded with counterparties. This application enables the management of collateral at the transaction level –useful for controlling and monitoring the status of specific operations– as well as at the position level by providing accumulated information according to different parameters or characteristics. Furthermore, said tool feeds the applications responsible for estimating counterparty risk by providing all the necessary parameters for considering the impact of mitigation in the portfolio due to the agreements signed.

Likewise, there is also an application that reconciles and adjusts the positions serving the Collateral and Risks units.

In order to uphold the effectiveness of collateral contracts, the Group carries out a daily monitoring of the market values of the operations governed by such contracts and of the deposits made by the counterparties. Once the amount of the collateral to be delivered or received is obtained, the collateral demand (margin call), or the demand received, is carried out at the intervals established in the contract, usually daily. If significant variations arise from the process of reconciliation between the counterparties, they are reported by the Collateral unit to the Risks unit for subsequent analysis and monitoring. Within the control process, the Collateral unit issues a daily report on the guarantees which includes the description by counterparty of the exposure and collateral, making special reference to those guarantee deficits at or beyond the set warning levels.

#### 4.3.1.3. Policies regarding the risk of adverse effects occurring due to correlations

Derivatives contracts may give rise to potential adverse correlation effects between the exposure to the counterparty and its credit quality (wrong-way-exposures). The Group has strict policies on the treatment of exposures of this nature. First, they follow specific admission

processes for each individual operation; and second, they compute the effects of risk, not for the potential value of the exposure but for 100% of its nominal value.

#### 4.3.1.4. Impact of collaterals in the event of a downgrade in thlitycredit rating

In derivatives operations, as a general policy the Group does not subscribe collateral contracts that involve an increase in the amount to be deposited in the event of the Group being downgraded.

The general criterion applied to date with banking counterparties is to establish a zero threshold within collateral contracts, independently of the mutual rang;K provision will be made as collateral of any difference that arises through mark-to-market valuation, however small it may be.

(Million euros)

Derivatives counterparty risk	2012	2011
Gross positive fair value of the contracts	53,616	49,989
Add-on	21,154	25,213
Positive effects of netting agreements	48,648	42,565
Credit exposure after netting and before collateral assigned	26,122	32,636
Collateral assigned	6,314	4,081
Credit exposure in derivatives after netting and before collateral assigned	19,808	28,555

#### 4.3.2. Amounts of counterparty risk

The calculation of the original exposure for the counterparty risk of derivatives, according to Rule Seventy-One in Bank of Spain Circular 3/2008, can be made by means of the following methods: original risk, mark-to-market valuation, standardized and internal models.

The Group calculates solely the value of exposure to risk through the mark-to-market method obtained as the aggregate of the positive mark-to-market value after contractual netting agreements plus the potential future risk of each transaction or instrument.

There follows a specification of the amounts in million euros involved in the counterparty risk of derivatives as at December 31, 2012 and 2011:

The management of new netting and collateral agreements has reduced counterparty exposure.

The total exposure to counterparty risk, composed basically of repo transactions and OTC derivatives, is €66,633 million and

€109,581 million, as of December 31, 2012 and 2011 respectively (after applying any compensation agreements applicable).

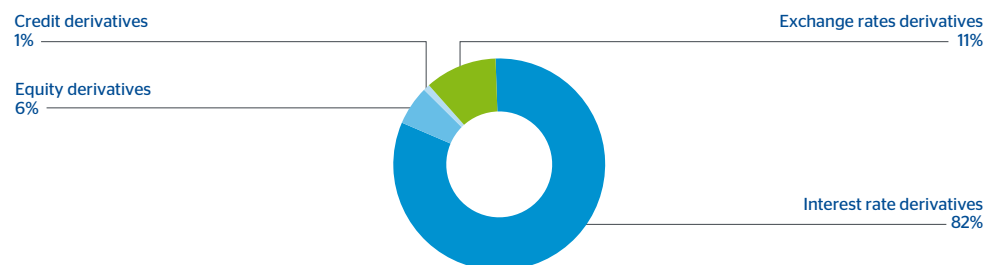
Below is the EAD for derivatives broken down by products:

#### 2012

(Million euros)

Products	Currency risk	Interest-rate risk	Equity risk	Commodity risk	Credit risk	Other risks	TOTAL
Term operations	1,652	51					1,703
FRAs		126	312	2			441
Swaps	484	14,361	144	25			15,014
Options	55	1,555	795	4		10	2,419
Other products		31			201		231
<b>TOTAL</b>	<b>2,191</b>	<b>16,123</b>	<b>1,252</b>	<b>32</b>	<b>201</b>	<b>10</b>	<b>19,808</b>

#### EAD for derivatives by products



#### 4.3.2.1. Credit derivative transactions

The table below shows the amounts corresponding to transactions with credit

derivatives used in intermediation activities:

As of December 31, 2012 and 2011 the Group did not hold any credit derivatives for use in its own lending portfolio.

#### 2012 (Million euros)

Classification of derivatives	Total notional amount of the transactions	Types of derivatives			
		On individual names (CDS)	On indexes (CDSI)	Nth to default baskets	Derivatives on tranches (CDO)
Protection purchased	23,700	12,841	9,373	930	557
Protection sold	23,969	13,931	9,386	85	567

#### 2011 (Million euros)

Classification of derivatives	Total notional amount of the transactions	Types of derivatives			
		On individual names (CDS)	On indexes (CDSI)	Nth to default baskets	Derivatives on tranches (CDO)
Protection purchased	44,159	16,232	26,313	986	628
Protection sold	43,422	16,630	26,122	10	659

## 4.4. Information on the standardized approach

### 4.4.1. Identification of external rating agencies

The external credit assessment institutions (ECAIs) appointed by the Group to determine the risk weightings applicable to its exposures are the following: Standard & Poor's, Moody's and Fitch.

The exposures for which the ratings of each ECAI are used are those corresponding to the wholesale portfolio, basically for "Central governments and central banks" in developed countries, and "Financial institutions".

In those cases in which a counterparty has ratings by different ECAIs, the Group follows the procedure laid down in Rule Twenty-one in the Solvency Circular, which specifies the order

of priority to be used in the assignment of ratings. When two different credit ratings made by designated ECAIs are available for a rated exposure, the higher risk weighting will be applied. However, when there are more than two credit ratings for the same rated exposure, use is to be made of the two credit ratings that provide the lowest risk weightings. If the two lowest risk weightings coincide, then that weighting will be applied; if they do not coincide, the higher of the two will be applied.

### 4.4.2. Assignment of the credit ratings of public share issues

The number of cases and the amount of these assignments is not relevant for

the Group in terms of admission and management of issuer credit risk.

### 4.4.3. Exposure values before and after the application of credit risk mitigation techniques

The following tables presents the amounts for net exposure, **prior to** the application of credit risk mitigation techniques, for different risk weightings and for the different categories of risk that correspond to the standardized method, excluding securitization positions.

The increase observed in exposures with weightings of 35% is basically due to the entry of the Unnim portfolio with

real-estate collateral already mentioned in earlier chapters. Conversely, there is less significant compensatory effect from the transfer of part of the portfolio of this segment in Spain to internal models.

In the weighted exposures 75% of the increase is derived from the entry of the Unnim portfolio and increased lending activity in the Latin American subsidiaries. These reasons also explain the increase in exposures weighted at 100%.

## 2012 (Million euros)

Category of exposure	Exposure net of allowances for losses							Total
	Risk weighting							
	0%	5% and 20%	22% and 35%	50%	75%	100%	110%-300%	
Central governments and central banks	90,803	197	0	3,625	0	13,560	0	108,185
Regional governments and local authorities	774	6,789	69	1,480	0	248	0	9,361
Public-sector institutions and other public entities	961	544	0	118	0	1,471	0	3,095
Multilateral development banks	0	117	0	13	0	56	0	187
International organizations	34	0	0	0	0	0	0	34
Institutions	0	15,011	125	1,324	0	2,381	3	18,843
Corporates	0	3,306	0	2,504	0	90,369	355	96,533
Retail	0	0	34	0	55,555	0	0	55,589
Collateralized with real-estate property	0	0	43,707	5,515	0	4,803	0	54,024
Default status	4	0	0	906	0	5,833	2,166	8,908
High risk	0	0	0	2	0	186	1,335	1,523
Guaranteed bonds	0	503	0	0	0	0	0	503
Short-term to institutions and corporates	0	637	0	0	0	19	0	656
Mutual funds	0	0	0	0	0	53	0	53
Other exposures	8,602	407	0	0	121	13,929	15	23,074
TOTAL <sup>(1)</sup>	101,179	27,511	43,935	15,486	55,676	132,907	3,874	380,567

(1) Does not include securitization positions.

## 2011 (Million euros)

Category of exposure	Exposure net of allowances for losses							Total
	Risk weighting							
	0%	5% and 20%	22% and 35%	50%	75%	100%	110%-300%	
Central governments and central banks	101,800	915	0	1,945	0	7,670	78	112,408
Regional governments and local authorities	689	5,160	0	3,934	0	2,315	30	12,128
Public-sector institutions and other public entities	680	1,918	0	813	0	701	3	4,114
Multilateral development banks	3	14	0	0	0	22	0	39
International organizations	12	0	0	0	0	0	0	12
Institutions	0	14,368	59	202	0	1,641	0	16,269
Corporates	0	4,871	0	3,475	0	82,266	391	91,003
Retail	0	0	0	0	47,864	0	0	47,864
Collateralized with real-estate property	0	0	34,513	4,689	0	5,987	0	45,189
Default status	0	0	0	712	0	4,896	1,850	7,457
High risk	0	0	0	0	0	95	1,738	1,833
Guaranteed bonds	0	78	0	0	0	0	0	78
Short-term to institutions and corporates	0	895	0	0	0	0	0	895
Mutual funds	0	0	0	0	0	216	0	216
Other exposures	8,249	886	0	0	0	11,361	13	20,510
TOTAL <sup>(1)</sup>	111,433	29,105	34,572	15,771	47,864	117,169	4,101	360,015

(1) Does not include securitization positions.



Below is a presentation of exposure amounts, **after** the application of credit risk mitigation techniques, for different risk weightings and for the different categories of risk that correspond to the standardized method, excluding securitization positions.

## 2012 (Million euros)

Category of exposure	Fully adjusted value of the exposure <sup>(1)</sup>							Total
	Risk weighting							
	0%	5% and 20%	22% and 35%	50%	75%	100%	110%-300%	
Central governments and central banks	83,767	203	0	3,625	0	13,560	0	101,155
Regional governments and local authorities	784	4,457	69	1,480	0	240	0	7,030
Public-sector institutions and other public entities	1,395	1,617	0	118	0	1,225	0	4,355
Multilateral development banks	13	117	0	13	0	56	0	200
International organizations	34	0	0	0	0	0	0	34
Institutions	0	15,071	125	1,333	0	2,205	3	18,736
Corporates	0	3,336	0	2,264	0	84,466	350	90,417
Retail	0	0	34	0	52,620	0	0	52,653
Collateralized with real-estate property	0	0	42,553	5,484	0	3,172	0	51,209
Default status	4	0	0	857	0	5,089	2,119	8,069
High risk	0	0	0	2	0	134	1,228	1,364
Guaranteed bonds	0	503	0	0	0	0	0	503
Short-term to institutions and corporates	0	626	0	0	0	19	0	645
Mutual funds	0	0	0	0	0	52	0	52
Other exposures	13,800	840	400	140	121	12,522	15	27,838
TOTAL <sup>(2)</sup>	99,797	26,772	43,181	15,316	52,740	122,740	3,715	364,261

(1) It is defined as the value of the exposure net of provisions, following the application of risk mitigation techniques.

(2) It does not include securitization positions.

## 2011 (Million euros)

Category of exposure	Fully adjusted value of the exposure <sup>(1)</sup>							Total
	Risk weighting							
	0%	5% and 20%	22% and 35%	50%	75%	100%	110%-300%	
Central governments and central banks	72,731	916	0	1,945	0	7,670	78	83,339
Regional governments and local authorities	689	5,176	0	1,984	0	2,299	30	10,178
Public-sector institutions and other public entities	680	1,918	0	734	0	690	3	4,025
Multilateral development banks	19	14	0	0	0	22	0	55
International organizations	12	0	0	0	0	0	0	12
Institutions	0	14,559	59	218	0	1,641	0	16,476
Corporates	0	4,904	0	3,383	0	78,690	391	87,368
Retail	0	0	0	0	46,757	0	0	46,757
Collateralized with real-estate property	0	0	33,323	4,689	0	5,879	0	43,891
Default status	0	0	0	667	0	4,886	1,849	7,402
High risk	0	0	0	0	0	92	1,717	1,809
Guaranteed bonds	0	78	0	0	0	0	0	78
Short-term to institutions and corporates	0	895	0	0	0	0	0	895
Mutual funds	0	0	0	0	0	216	0	216
Other exposures	14,038	1,117	428	0	0	11,393	20	26,997
TOTAL <sup>(2)</sup>	88,170	29,577	33,810	13,620	46,757	113,477	4,086	329,497

(1) It is defined as the value of the exposure net of provisions, following the application of risk mitigation techniques.

(2) It does not include securitization positions.

## 4.5. Information on the IRB method

### 4.5.1. General information

#### 4.5.1.1. Authorization by the Bank of Spain for the use of the IRB method

The following is a list of the models authorized by the Bank of Spain for the purpose of their use in the calculation of capital requirements.

In 2012 the Bank of Spain authorized the use of internal models, with effect as of June 30, 2012, for the Consumer Finance and Credit Card portfolios in BBVA S.A.

Institution	Portfolio
BBVA S.A, Uno-E Bank BBVA Ireland	Financial institutions
	Public institutions
	Consumer finance
	Retail Revolving (Credit Cards)
	Corporates
	Corporates
	Developers
	Retail mortgages
BBVA Bancomer	Specialist finance
	Autos Finanzia
BBVA Bancomer	Retail Revolving (Credit Cards)
BBVA Group	Equity

The approval of the models by the Bank of Spain includes both own estimations of the probability of default (PD), loss given default (LGD) and the internal estimation of credit conversion factors (CCFs).

The Group maintains its calendar for receiving approval for additional advanced internal models in different types of risks and geographical areas.

#### 4.5.1.2. Structure of internal rating systems and relationship between internal and external ratings

The Group has rating tools for each one of the exposure categories listed in the Basel Accord.

The retail portfolio has scoring tools for determining the credit quality of transactions on the basis of information on the transaction itself and on the customer. The scoring models are algorithms calculated using statistical methods that score each transaction. This score reflects the transaction's level of risk and is in direct relation to its probability of default (PD).

These decision models are the basic tool for deciding who should receive a loan and the amount to be granted, thereby contributing to both the arrangement and management of retail-type loans.

For the wholesale portfolio, the Group has rating tools that, unlike scorings, do not assess transactions but rather, customers. The Group has different tools for rating the various customer segments: small companies, corporates, government and other government agencies, etc. In those

wholesale portfolios where the number of defaults is very low (sovereign risks, corporates, financial institutions) the internal information is supplemented by the benchmarks of external rating agencies.

The PD estimates made by the Group are transferred to the Master Scale, enabling a

Internal reduced-list ratings (17 groups)	Probability of default (in basis points)		
	Average	Minimum from ≥	Maximum
AAA	1	–	2
AA+	2	2	3
AA	3	3	4
AA–	4	4	5
A+	5	5	6
A	8	6	9
A–	10	9	11
BBB+	14	11	17
BBB	20	17	24
BBB–	31	24	39
BB+	51	39	67
BB	88	67	116
BB–	150	116	194
B+	255	194	335
B	441	335	581
B–	785	581	1,061
CCC+	1,191	1,061	1,336
CCC	1,500	1,336	1,684
CCC–	1,890	1,684	2,121
CC+	2,381	2,121	2,673
CC	3,000	2,673	3,367
CC–	3,780	3,367	4,243

comparison to be made with the scales used by external agencies. This is shown below.

#### 4.5.1.3. Use of internal estimations for purposes other than the calculation of capital requirements

The Group's internal estimations are a vital component of management based on value creation, giving rise to criteria for assessing the risk-return trade-off.

These measures have a broad range of uses, from the adoption of strategic business decisions through to the individual admission of transactions.

Specifically, internal estimations are used in everyday business in support of credit risk management through their inclusion in admission and monitoring processes, as well as in the pricing of transactions.

The management use of performance metrics that consider expected loss, economic capital and risk-adjusted return enables the monitoring of portfolios and the assessment of non-performing positions, among others.

#### 4.5.1.4. Process for managing and recognizing the effects of credit risk mitigation

The Group uses risk mitigation techniques for exposures pertaining to the wholesale

portfolio by replacing the obligor's PD with that of the guarantor, in those cases in which the latter is eligible and their PD is lower than the obligor's.

In retail admission processes, the scoring contains the effect of the guarantor, and the recovery flows that are forthcoming throughout the cycle reflect the recoveries related to the guarantees associated with the contracts. This means that the effect of the guarantees is taken into account in the actual estimation of the loss given default for retail portfolios.

#### 4.5.1.5. Mechanisms used for controlling internal rating systems

The entity carries out the control and monitoring of the rating systems and metrics for risk management for private individuals, SMEs and the self-employed, corporates and institutions. The activities are carried out, within certain analytical and qualitative fields, by realizing periodic 360° monitoring of all impacts of the tools as well as their internal function in terms of efficiency and effectiveness.

Global understanding of the systems allows action plans to be established, with a follow-up to ensure their proper execution. The weaknesses of the rating tools are thus identified and managed. The monitoring function is the main driving force of new developments and evolving maintenance, which allow the business interests of the entity to be aligned with regulatory requirements and management needs within

a framework of analytical, technical and technological capacities.

In general, there is a series of corporate management programs that establish the main lines and minimum contents determining the management and/or supervision of the different credit risk models, as well as defining the metrics for their correct control.

More specifically, these corporate management programs will be adjusted to each of the rating tools of a business area within a time horizon adapted to the nature of the tool. Periodically, an overall monitoring and review of compliance with the thresholds agreed under the management program will be carried out to detect situations that could potentially require an adjustment to the models and/or credit policies and to take early corrective actions to minimize the impact of such situations.

Analysis, in the methodological sphere, is defined as the monitoring of the predictive capabilities of the models, backtesting calibration of the parameters, proper granularity and concentration, sample stability of input, as well as traceability, integrity and consistency.

The use of rating systems by the different areas is overseen from the context of integration in management. This context defines parameter sensitivity tests, stress-tests of estimates, proper use of the parameters in the portfolio management to facilitate decision-making, control of exposure without rating, risk policies

and the framework for delegating tasks, structures of decision-making committees, implementation risk evaluation, proper technological environment, evaluation of the inclusion of the parameters in corporate applications, proper follow-up of the training of users to guarantee its proper implementation and full comprehension, follow-up of the correct structure and quality of documentation, as well as all other activities that ensure the correct use of management metrics.

Apart from the corporate management programs mentioned above, access to the internal rating systems is based on IT system-authorized profiles that ensure only the customer loan management supervisors can see the scoring and rating.

Control of the capital process is performed by Risk units that are independent of the units that calculate the scoring and rating and which, therefore, are users of the internal rating system. These control mechanisms are established at different levels of the process, such as at input, execution and final outputs, and involve both the integrity of the data and their accuracy and correctness.

#### 4.5.1.6. Description of the internal rating process

There follows a description of the internal classification processes according to each customer category:

- **Central banks and central governments:** For this segment, the assignment

of ratings is made by the Risk units nominated accordingly, which periodically analyze customers of this nature, rating them according to the parameters included in the corresponding rating model. This model comprises different tools depending on the type of country: developed, emerging or peripheral. Sovereign ratings are generated in local and foreign currency for these three tools, as well as a transfer rating, which evaluates the risk of inconvertibility/transfer restrictions.

In general the rating obtained is based on the ratings of external agencies, where they exist, except for the emerging economies tool in foreign currency. In this case, the ratings are calculated based on an in-house model that establishes a relationship between the score given to each country by the corresponding unit and the empirical PD of the rating agencies. This classifies the countries on the BBVA master scale.

In the case of emerging countries with presence of BBVA subsidiaries or branches, the rating in local currency is adjusted to that obtained by the emerging countries' tool under the authorization of the Risk Committee assigned for this purpose.

- **Institutions:** The rating of public institutions is generally provided by the risk units responsible for their approval, on a yearly basis, coinciding with the review of customer risk or with the reporting of their accounts.

In the case of Financial Institutions, the Risk unit responsible makes a regular assessment of this type of customer, continuously monitoring their evolution on domestic and international markets. External ratings are a key factor in assigning ratings for financial institutions.

- **Corporates:** Includes the rating of exposures with corporate business groups. The result is influenced by both qualitative (business positioning, financial flexibility, etc.) and quantitative indicators (size of group by sales, debt levels, etc.). The rating of these customers is generally calculated within the framework of the annual risk review process, or the admission of new operations. The responsibility for the assessment lies with the units originating the risk, while those approving it validate it when the decision is taken.
- **Companies and nies:** This segment also takes into account quantitative factors derived from economic and financial information, as well as qualitative factors related to the age of the company, the sector, the quality of its management, etc. As in the case of the corporate sector, the rating tends to be parallel to the admission process, so that responsibility for the rating is with the unit originating the risk, while the decision-making body validates it.
- **Specialist Finance:** For this segment, the Group has chosen to apply the supervisory slotting criteria approach, as included in the Basel Accord of June 2004 and in the Solvency Circular.

- **Developers:** The rating of real-estate developers allows the rating of both the customers who are developers and the individual real-estate projects. Its use makes it easier to monitor and rate projects during their execution phase, as well as enriching the admission process.

In general in the wholesale area, the rating of customers is not limited to admission, as the ratings are updated according to new information available at any time (economic and financial data, changes in the company, external factors, etc.)

- **Retail:** This has been broken down into each one of the exposure categories referred to by the correlations foreseen in the sections defined in the Solvency Circular.

One of the most important processes in which scoring is fully integrated at the highest level and in all decision-making areas is the Group's process for approving retail transactions. Scoring is an important factor for the analysis and resolution of transactions and it is a mandatory requirement to include it in decision-making on risk in those segments for which it has been designed. In the process of marketing and approving retail transactions, the manager is responsible for marketing management, the quality of the risk and the return, in other words, the customer's comprehensive management, attending to the processes of admission, monitoring and control.

The rating process is as follows for each specific category of retail exposure:

- Mortgages, Consumer finance and Retail credit cards - Spain: The manager collects data on the customer (personal, financial, banking relationship information) and on the operation (LTV, amount, maturity, destination etc.) and calculates the rating of the transaction with the scoring. The decision of whether it is approved is made based on the results issued by the model.
- Autos Finanzia: The financing application may enter through the call center or be directly recorded in Finanzianet by our authorized dealers. The necessary information on the customer (personal, financial information, authorization of the consult from the external bureau of credit) and on the transaction (maturity, amount, etc.) is recorded to rate the transaction with the scoring. Once the validity of the information provided is obtained, the decision of whether to approve it is made based on the results issued by the model.
- Retail Revolving (BBVA Bancomer credit cards): The manager or specialist party gathers the necessary information on the customer (personal, financial information and authorization of the consult from the external bureau of credit) and on the transaction (limit requested) to rate the transaction with the scoring. There are additional processes for validating and checking this information through the back office or operational support areas. The decision of whether it is approved is made based on the results issued by the model.

- Proactive - Spain: Each month all the customers who have asset positions in credit cards, consumer finance or mortgages and the first holders of liabilities position, are rated according to information on their behavior.

- **Equity:** For its portfolio position registered as equity, the Group is applying the rating obtained for customers as a result of their classification in the lending process.

#### 4.5.1.7. Definitions, methods and data for estimating and validating risk parameters

The estimation of the parameters is based on the uniform definition of default established at Group level. Specifically, for a contract or customer to be considered in a situation of default, the provisions of section 4.1.1 must be met, in line with current regulations.

Specifically, there are two approaches within the Group for considering default and estimating parameters:

- The contract-level approach is applied within the sphere of retail risk. Each customer transaction is dealt with as an independent unit in terms of credit risk. Therefore, non-compliance with credit obligations towards the bank is handled at the transaction level, regardless of the behavior of the customer with respect to other obligations.
- The customer-level approach is applied to the remainder of the portfolio. The significant unit for defining default is the

customer's sum of contracts, which enter a situation of default en masse when the customer defaults.

In addition, to avoid including defaults for small amounts in the estimations, defaulted volumes are to pass through a materiality filter that depends on the type of customer and transaction.

### Estimating parameters

The Group has an RAR information system that reflects exposure to credit risk in the Group's different portfolios included in advanced internal models.

RAR guarantees the availability of historical data recorded by the Group, which are used to estimate the parameters of Probability of Default (PD), Loss Given Default (LGD) and Credit Conversion Factors (CCF). These are then used to calculate the regulatory capital using the advanced measurement approach, economic capital and expected loss by credit risk. Other sources of information for the Bank may be used in addition, depending on any new needs detected in the estimation process. Internal estimations of the PD, LGD and CCF parameters are made for all the Group's portfolios.

In the case of low default portfolios (LDP), in which the number of defaults tends to be insufficient for obtaining empirical estimates, use is made of data from external agencies that are merged with the internal information available and expert criteria.

There follows a detail of the estimation methodologies used for the PD, LGD and CCF risk parameters.

#### *a. Probability of default (PD)*

The methodology used for estimating the PD in those cases that have a mass of internal data of sufficient size is based on the creation of pools of exposures. The groups proposed with a view to calibration are defined by pooling contracts together seeking to achieve intra-group uniformity in terms of credit quality and differentiation with all the other risk groups. The largest possible number of pools is defined in order to allow a suitable discrimination of risk. The basic metric used for making these groupings is the score, being supplemented by other metrics relevant to PD that are proven to be sufficiently discriminating depending on the portfolio.

Once the pools of exposures have been defined, the average empirical PD recorded for each one is obtained and adjusted to the cycle. This metric provides stable estimates over the course of the economic cycle, referred to as PD-TTC (Through the Cycle). This calculation considers the portfolio's track record and provides long-term levels of PD.

In low default portfolios (LDPs) the empirical PDs imputed by External Credit Assessment Institutions are used to obtain the PD of internal risk groups.

Finally, in customer-focused portfolios there is a Master Scale, which is simply a standard

and uniform rule for credit levels that makes it possible to make comparisons of credit quality in the Group's different portfolios.

#### *b. Loss given default (LGD)*

As a general rule, the method used to estimate LGD in portfolios with a sufficient number of defaults called the Workout LGD. Here, the LGD of a contract is obtained as a quotient of the sum of all the financial flows recorded during the recovery process that takes place when a transaction defaults, and the transaction's exposure at the time of the default.

This estimate is made by considering all the historical data recorded in internal systems. When making the estimates, there are transactions that have already defaulted but for which the recovery process is still ongoing. The loss given default recorded at the time of the estimate is therefore higher than it will ultimately be. The necessary adjustments are made in these cases so as not to distort the estimate.

These estimates are made by defining uniform risk groups in terms of the nature of the operations that determine loss given default. They are made in such a way that there are enough groups for each one to be distinguishable and receive a different estimate.

In keeping with the guidelines set out by the rules, the estimates are made by distinguishing between wholesale and retail type exposures.

There is insufficient historical experience to make a reliable estimation in low default portfolios (LDP) using the Workout LGD method, so external sources of information are used, combined with internal data to provide the portfolio with a representative rate of loss given default.

The loss given default rates estimated according to the internal databases the Group holds are conditioned to the moment of the cycle of the data window used, since loss given default varies over the economic cycle. Hence, two concepts can be defined: long-term loss given default, referred to as Long-Run LGD (LRLGD), and loss given default at the worst moment in the cycle, called Downturn LGD (DLGD).

LRLGD is calculated by making an adjustment to capture the difference between the loss given default obtained empirically with the available sample and the average loss given default observed throughout the economic cycle if the observation is complete.

In addition, the LGD observed in the worst moment of the economic cycle is determined (DLGD). An internal model is available to determine this in the case of portfolios where this worsening in the LGD has not been observed.

These estimates are made for those portfolios whose loss given default is noticeably sensitive to the cycle. The different ways of the recovery cycles can conclude are determined for each portfolio where this worse LGD has not yet been observed, and

the level these parameters would have in a downturn situation are estimated.

*c. Credit conversion factor (CCF)*

As with the two preceding parameters, the exposure at the moment of default is another of the necessary inputs for calculating expected loss and regulatory capital. A contract's exposure usually coincides with its balance. However, this does not hold true in all cases. For example, for those products with explicit limits, such

as credit cards or credit lines, the exposure should incorporate the potential increase in the balance that may be recorded up to the time of default.

In observance of regulatory requirements, exposure is calculated as the drawn balance, which is the real risk at any specific moment, plus a percentage (CCF) of the undrawn balance, which is the part that the customer can still use until the available limit is reached. Therefore, the CCF is defined as the percentage of the undrawn

balance that is expected to be used before default occurs.

CCF is estimated by using the cohort approach, analyzing how the exposure varies from a pre-established reference date through to the moment of default, obtaining the average performance according to the relevant metrics.

Different approaches are used for wholesale and retail type exposures. The contract approach analyzes the exposure's evolution

until the contract's moment of breach of contract, whereas the customer approach analyzes the exposure's evolution through to the moment of breach by the customer.

Once again, in low default portfolios (LDP) there is insufficient historical experience to make a reliable calculation with the Workout LGD method defined. In this case, too, use is made of external sources that are combined with internal data to provide a representative CCF of the portfolio.

## 4.5.2. Exposure values by category and obligor grade

The following table presents the information on credit risk by method of internal classifications (IRB) by obligor

grade for the different categories of exposure. The information shown is balance-sheet volume, off-balance-sheet volume, exposure, EAD, PD-TTC and Downturn LGD and RW (internal estimates approved by the Bank of Spain):

2012 (Million euros)

Categories of Exposure	Balance on balance sheet reassigned <sup>(1)</sup>	Balance off balance sheet reassigned <sup>(2)</sup>	Exposure reassigned <sup>(3) = (1+2)</sup>	EAD <sup>(4)</sup>	PD-TTC (%)	DLGD (%)	RWA	RW (%)
<b>Central governments and central banks</b>	<b>1,947</b>	<b>859</b>	<b>2,805</b>	<b>2,382</b>	<b>1.03</b>	<b>40.78</b>	<b>210</b>	<b>8.82</b>
From AAA to AA-	379	245	624	507	0.01	32.78	9	1.75
From A+ to A-	1,039	346	1,385	1,213	0.10	42.93	8	0.68
From BBB+ to BBB-	453	151	604	529	0.16	43.16	35	6.66
From BB+ to BB-	54	0	54	54	0.99	42.41	53	97.81
From B+ to B-	2	114	116	59	2.56	39.99	85	144.08
C	0	0	0	0	21.22	40.00	0	226.72
D	20	2	21	20	100.00	47.63	20	95.34
<b>Institutions</b>	<b>71,686</b>	<b>5,882</b>	<b>77,568</b>	<b>75,187</b>	<b>0.44</b>	<b>25.97</b>	<b>14,240</b>	<b>18.94</b>
From AAA to AA-	7,897	1,023	8,920	8,450	0.03	26.72	448	5.30
From A+ to A-	32,868	1,269	34,136	33,722	0.07	26.39	3,983	11.81
From BBB+ to BBB-	25,009	3,009	28,018	26,798	0.24	26.75	7,095	26.48
From BB+ to BB-	4,576	544	5,119	4,859	0.87	19.38	1,798	37.00
From B+ to B-	937	25	962	952	3.62	14.45	460	48.29
C	299	12	311	305	21.22	21.29	362	118.43
D	100	1	101	100	100.00	54.77	95	94.44
<b>Corporates</b>	<b>75,084</b>	<b>56,583</b>	<b>131,668</b>	<b>106,014</b>	<b>9.91</b>	<b>41.17</b>	<b>64,188</b>	<b>60.55</b>
<b>Total exposures assigned to obligor grades or pools of exposures</b>	<b>64,074</b>	<b>53,615</b>	<b>117,690</b>	<b>93,453</b>	<b>9.91</b>	<b>41.17</b>	<b>53,831</b>	<b>57.60</b>
From AAA to AA-	2,263	3,067	5,330	3,753	0.03	39.28	522	13.92
From A+ to A-	8,111	14,473	22,584	15,784	0.08	43.16	3,742	23.70
From BBB+ to BBB-	20,415	25,792	46,207	35,094	0.22	37.42	11,176	31.85
From BB+ to BB-	11,483	6,745	18,228	15,229	0.89	41.36	11,094	72.85
From B+ to B-	11,949	2,796	14,745	13,393	4.88	42.37	17,328	129.38
C	2,171	272	2,443	2,308	21.01	31.80	3,776	163.57
D	7,683	471	8,154	7,892	100.00	55.07	6,193	78.47
<b>Specialist finance</b>	<b>11,010</b>	<b>2,968</b>	<b>13,978</b>	<b>12,561</b>			<b>10,357</b>	<b>82.45</b>

(Continued)

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Categories of Exposure	Balance on balance sheet reassigned <sup>(1)</sup>	Balance off balance sheet reassigned <sup>(2)</sup>	Exposure reassigned <sup>(3) = (1+2)</sup>	EAD <sup>(4)</sup>	PD-TTC (%)	DLGD (%)	RWA	RW (%)
<b>Retail</b>	<b>83,895</b>	<b>10,159</b>	<b>94,054</b>	<b>86,653</b>	<b>5.41</b>	<b>25.41</b>	<b>25,779</b>	<b>29.73</b>
<b>Secured by real-estate collateral</b>	<b>70,590</b>	<b>380</b>	<b>70,970</b>	<b>70,630</b>	<b>4.72</b>	<b>16.10</b>	<b>14,874</b>	<b>21.06</b>
From AAA to AA-	23,364	180	23,544	23,382	0.03	12.41	295	1.26
From A+ to A-	15,228	85	15,312	15,237	0.08	13.33	431	2.83
From BBB+ to BBB-	9,991	59	10,050	9,997	0.24	16.19	778	7.78
From BB+ to BB-	10,637	38	10,675	10,641	0.85	17.65	2,254	21.18
From B+ to B-	5,571	16	5,586	5,572	4.72	22.12	4,035	72.41
C	3,600	2	3,603	3,601	20.41	25.04	5,172	143.62
D	2,201	0	2,201	2,201	100.00	36.77	1,909	86.76
<b>Qualifying revolving retail</b>	<b>6,742</b>	<b>9,674</b>	<b>16,415</b>	<b>9,427</b>	<b>7.41</b>	<b>76.33</b>	<b>7,477</b>	<b>79.31</b>
From AAA to AA-	285	1,724	2,009	539	0.03	46.71	6	1.13
From A+ to A-	71	299	370	134	0.08	47.43	3	2.53
From BBB+ to BBB-	698	2,087	2,784	1,159	0.24	73.12	149	12.89
From BB+ to BB-	1,854	2,872	4,727	2,687	0.96	76.76	876	32.59
From B+ to B-	2,613	2,072	4,685	3,401	4.99	80.40	3,500	102.91
C	1,002	618	1,621	1,287	21.81	81.44	2,803	217.76
D	219	1	220	219	100.00	85.41	139	63.22
<b>Other retail assets</b>	<b>6,563</b>	<b>105</b>	<b>6,668</b>	<b>6,596</b>	<b>9.97</b>	<b>52.05</b>	<b>3,400</b>	<b>51.54</b>
From AAA to AA-	883	20	903	886	0.03	45.60	43	4.83
From A+ to A-	353	7	360	357	0.07	56.49	40	11.24
From BBB+ to BBB-	741	16	757	747	0.24	57.18	199	26.70
From BB+ to BB-	1,424	36	1,460	1,433	0.98	54.42	780	54.45
From B+ to B-	2,357	25	2,381	2,368	5.11	48.36	1,765	74.52
C	362	2	364	363	21.41	52.47	408	112.37
D	442	0	442	442	100.00	64.54	164	37.15
<b>Equity PD/LGD Method</b>	<b>4,798</b>	<b>0</b>	<b>4,798</b>	<b>4,798</b>	<b>0.46</b>	<b>80.57</b>	<b>6,216</b>	<b>129.56</b>
From A+ to A-	713	0	713	713	0.09	65.00	500	70.04
From BBB+ to BBB-	3,483	0	3,483	3,483	0.15	84.17	4,015	115.29
From BB+ to BB-	266	0	266	266	0.62	65.00	489	183.52
From B+ to B-	335	0	335	335	4.32	88.69	1,212	362.06
<b>TOTAL BY CATEGORY AND OBLIGOR GRADE</b>	<b>237,409</b>	<b>73,483</b>	<b>310,892</b>	<b>275,034</b>	<b>5.66</b>	<b>32.73</b>	<b>110,633</b>	<b>40.22</b>

(2) Amount not used included in memorandum accounts corresponding mainly to sums undrawn from credit lines and cards, as well as exposures in letters of credit and documentary credits.

(3) This refers to exposure following the application of credit risk mitigation techniques.

(4) Value of the exposure in the event of default.

As indicated above, the EAD fell in 2012 due to the deleveraging process in the Spanish market in response to the economic situation.

However, in the category of Retail, the EAD increased due to the transfer of the internal Credit Card and Consumer Finance models in Spain.

## 2011 (Million euros)

Categories of Exposure	Balance on balance sheet reassigned <sup>(1)</sup>	Balance off balance sheet reassigned <sup>(2)</sup>	Exposure reassigned <sup>(3) = (1+2)</sup>	EAD <sup>(4)</sup>	PD-TTC (%)	DLGD (%)	RWA	RW (%)
<b>Central governments and central banks</b>	<b>2,755</b>	<b>993</b>	<b>3,748</b>	<b>3,228</b>	<b>0.82</b>	<b>33.92</b>	<b>568</b>	<b>17.60</b>
From AAA to AA-	2,282	810	3,092	2,664	0.03	32.17	296	11.12
From A+ to A-	265	90	355	309	0.08	43.04	119	38.43
From BBB+ to BBB-	102	76	178	141	0.21	41.59	53	37.87
From BB+ to BB-	82	11	93	88	0.89	38.60	73	83.18
From B+ to B-	2	0	2	2	2.57	39.93	3	n.m.
C	0	0	0	0	21.22	40.00	0	n.m.
D	22	5	27	24	100.00	47.74	23	96.83
<b>Institutions</b>	<b>91,098</b>	<b>7,674</b>	<b>98,772</b>	<b>95,412</b>	<b>0.19</b>	<b>23.95</b>	<b>15,652</b>	<b>16.40</b>
From AAA to AA-	24,377	2,213	26,589	25,646	0.03	25.59	2,606	10.16
From A+ to A-	46,244	2,987	49,231	47,934	0.07	22.89	6,681	13.94
From BBB+ to BBB-	16,458	2,155	18,614	17,628	0.17	24.31	3,992	22.64
From BB+ to BB-	3,767	305	4,072	3,946	0.94	23.59	1,996	50.60
From B+ to B-	144	11	155	149	4.08	37.26	185	n.m.
C	53	3	56	55	21.22	45.00	147	n.m.
D	54	0	54	54	100.00	32.52	45	83.06
<b>Corporates</b>	<b>91,360</b>	<b>62,661</b>	<b>154,021</b>	<b>123,761</b>	<b>7.26</b>	<b>40.53</b>	<b>76,739</b>	<b>62.01</b>
<b>Total exposures assigned to obligor grades or pools of exposures</b>	<b>81,238</b>	<b>59,106</b>	<b>140,343</b>	<b>111,901</b>	<b>7.26</b>	<b>40.53</b>	<b>67,349</b>	<b>60.19</b>
From AAA to AA-	9,580	5,265	14,845	12,369	0.04	29.08	1,644	13.29
From A+ to A-	12,623	18,317	30,939	22,289	0.08	37.89	4,995	22.41
From BBB+ to BBB-	18,498	23,729	42,227	30,907	0.20	41.72	12,536	40.56
From BB+ to BB-	16,205	7,706	23,911	20,142	0.94	44.15	15,924	79.06
From B+ to B-	16,043	3,460	19,502	17,628	4.81	41.97	22,425	127.21
C	1,840	298	2,137	1,990	21.20	38.60	4,060	203.96
D	6,450	332	6,782	6,576	100.00	50.96	5,765	87.66
<b>Specialist finance</b>	<b>10,122</b>	<b>3,556</b>	<b>13,678</b>	<b>11,860</b>	<b>0.00</b>	<b>0.00</b>	<b>9,390</b>	<b>79.17</b>

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Categories of Exposure	Balance on balance sheet reassigned <sup>(1)</sup>	Balance off balance sheet reassigned <sup>(2)</sup>	Exposure reassigned <sup>(3) = (1+2)</sup>	EAD <sup>(4)</sup>	PD-TTC (%)	DLGD (%)	RWA	RW (%)
<b>Retail</b>	<b>76,550</b>	<b>5,880</b>	<b>82,430</b>	<b>78,512</b>	<b>4.80</b>	<b>24.16</b>	<b>26,917</b>	<b>34.28</b>
<b>Secured by real-estate collateral</b>	<b>68,643</b>	<b>217</b>	<b>68,859</b>	<b>68,668</b>	<b>4.23</b>	<b>17.53</b>	<b>19,052</b>	<b>27.74</b>
From AAA to AA-	571	0	571	571	0.04	5.32	4	0.70
From A+ to A-	2,003	15	2,018	2,004	0.08	17.07	75	3.75
From BBB+ to BBB-	14,858	76	14,934	14,867	0.23	14.09	985	6.63
From BB+ to BB-	38,333	119	38,452	38,347	0.99	14.98	7,468	19.47
From B+ to B-	10,659	7	10,666	10,660	3.75	25.98	8,268	77.56
C	155	0	155	155	17.61	27.40	246	158.29
D	2,064	0	2,064	2,064	100.00	49.32	2,006	97.19
<b>Qualifying revolving retail</b>	<b>4,711</b>	<b>5,663</b>	<b>10,374</b>	<b>6,648</b>	<b>8.59</b>	<b>81.79</b>	<b>6,108</b>	<b>91.88</b>
From AAA to AA-	0	0	0	0	0.00	0.00	0	-
From BBB+ to BBB-	398	1,429	1,827	742	0.25	79.44	110	14.87
From BB+ to BB-	1,301	2,053	3,354	1,971	0.98	81.58	690	35.02
From B+ to B-	2,005	1,667	3,673	2,689	5.05	82.58	2,843	105.73
C	843	513	1,356	1,083	23.13	81.04	2,351	217.14
D	163	1	164	163	100.00	86.85	113	69.16
<b>Other retail assets</b>	<b>3,196</b>	<b>0</b>	<b>3,196</b>	<b>3,196</b>	<b>8.99</b>	<b>46.67</b>	<b>1,757</b>	<b>54.97</b>
From AAA to AA-	777	0	777	777	0.03	44.99	37	4.72
From A+ to A-	1	0	1	1	0.08	26.66	0	5.68
From BBB+ to BBB-	18	0	18	18	0.21	28.71	2	10.86
From BB+ to BB-	328	0	328	328	1.33	45.78	175	53.33
From B+ to B-	1,806	0	1,807	1,807	5.70	45.74	1,310	72.52
C	99	0	99	99	11.92	43.57	82	82.69
D	168	0	168	168	100.00	69.99	152	90.45
<b>Equity PD/LGD Method</b>	<b>4,730</b>	<b>0</b>	<b>4,730</b>	<b>4,730</b>	<b>0.14</b>	<b>83.35</b>	<b>4,643</b>	<b>98.16</b>
From AAA to AA-	44	0	44	44	0.09	65.00	31	69.65
From A+ to A-	4,471	0	4,471	4,471	0.10	84.14	4,233	94.68
From BBB+ to BBB-	85	0	85	85	0.20	65.00	87	102.60
From BB+ to BB-	60	0	60	60	0.66	86.19	126	210.95
From B+ to B-	70	0	70	70	2.55	65.00	166	236.04
<b>TOTAL BY CATEGORY AND OBLIGOR GRADE</b>	<b>266,493</b>	<b>77,208</b>	<b>343,701</b>	<b>305,643</b>	<b>4.24</b>	<b>31.74</b>	<b>124,519</b>	<b>40.74</b>

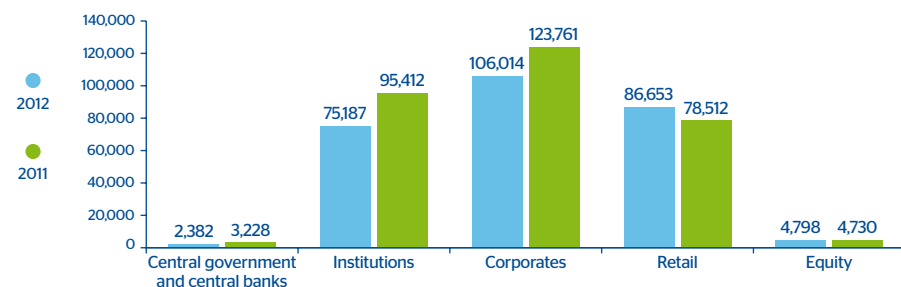
(2) Amount not used included in memorandum accounts corresponding mainly to sums undrawn from credit lines and cards, as well as exposures in letters of credit and documentary credits.

(3) This refers to exposure following the application of credit risk mitigation techniques.

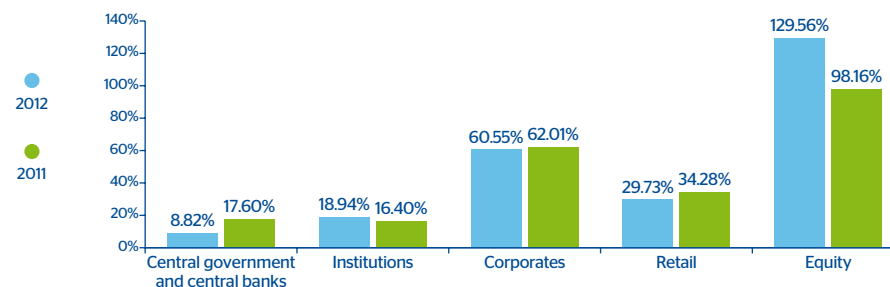
(4) Value of the exposure in the event of default.



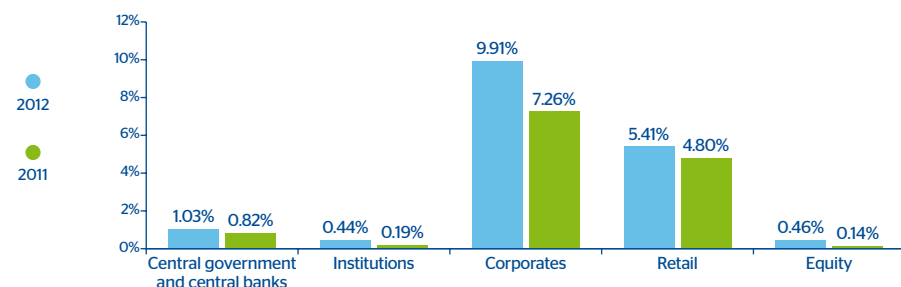
## EAD by category



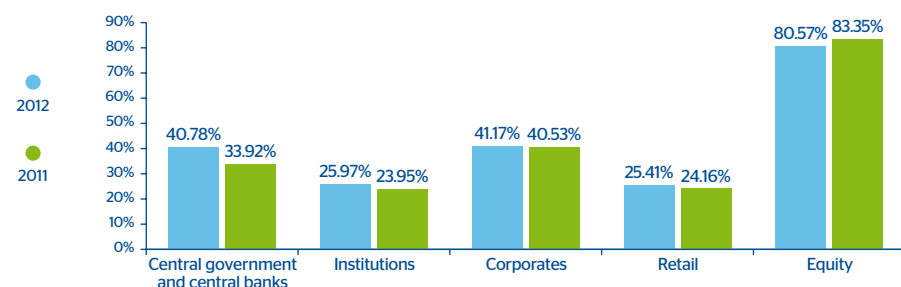
## Average weighted risk by EAD



## Average weighted PD by EAD



## Average weighted DLGD by EAD



### 4.5.3. Comparative analysis of the estimates made

The following charts compare the expected loss adjusted to the cycle calculated according to the Group's core internal models in Spain approved by the Bank of Spain, with the effective loss incurred between 2001 and 2012. They also present the average effective loss between 2001 and 2012 in accordance with the following:

- Estimated expected loss calculated with the internal models calibrated to 2012, and adjusted to the economic cycle (light green line), i.e. the annual average expected loss in an economic cycle.
- Incurred loss (dark blue line): calculated as the ratio of gross additions to NPA over the average observed exposure multiplied by the estimated point-in-time LGD.<sup>(1)</sup>

- Effective average incurred loss (2001-2011), which is the average incurred losses for each year (light blue line).

The effective loss is the annual loss incurred. It must be less than the expected loss adjusted to the cycle in the best years of an economic cycle, and greater during years of crisis.

The comparison has been made for the portfolios of mortgages, consumer finance and retail credit cards and SMEs and Developers. Regarding the categories of Institutions (Public and Financial Institutions) and Corporates, historical experience shows that there is such a small number of defaulted exposures (Low Default Portfolios) that it is not statistically significant, and hence the reason the comparison is not shown. The charts show that during the years of biggest economic growth, in general the effective

(1) This criterion for calculation has been modified since the report published last year, as the LGD (PIT) methodology is a better way of calculating the observed losses. For more recent years, given that the recovery processes have not concluded, the best estimate of final LGD is included.

loss was significantly lower than the expected loss adjusted to the cycle calculated using internal models.

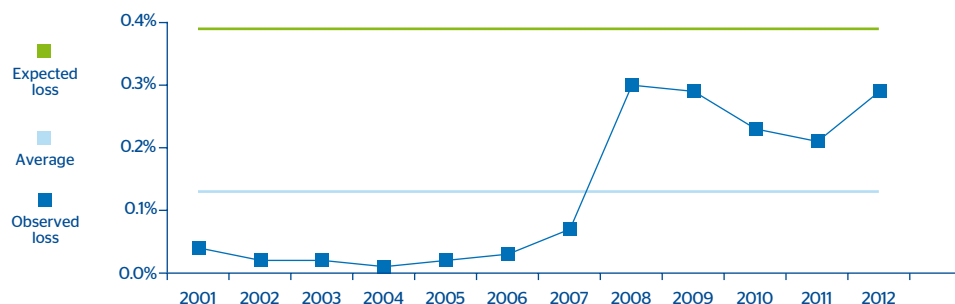
The contrary was the case after the start of the crisis. This is in line with the major economic slowdown and the financial difficulties of households and companies, above all in the case of companies dedicated to development and construction.

An exception to this is the mortgage portfolio, where observed losses for all the

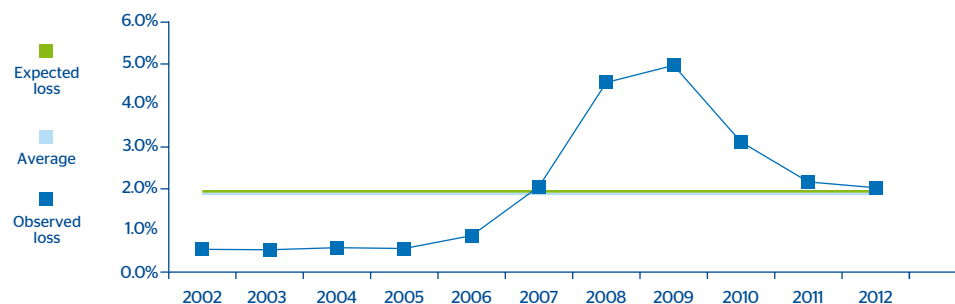
years are under the expected losses, thus showing the conservative nature of the estimate.

The fact that in some portfolios the average observed loss is greater than the estimated loss is coherent with the fact that the observed time window may be worse than what would be expected in a complete economic cycle. In fact, this window has as many expansive years as crisis years (five of each). This is not representative of a complete economic cycle.

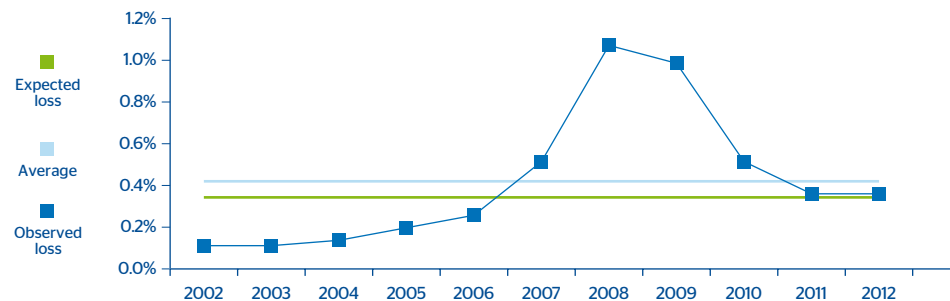
## Mortgages



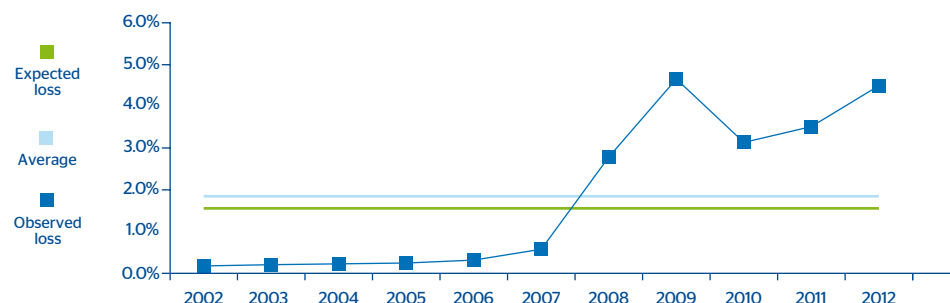
## Consumer finance



## Credit cards



## SMEs and developers



## Impairment losses

The table below shows the balance of specific, generic and country risk allowances

for losses, by exposure categories, as of December 31, 2012 and 2011.

(Million euros)

Categories of exposure	Loan-loss provisions	
	2012	2011
Central governments and central banks	2	4
Institutions	53	44
Corporates	6,284	3,357
Retail	1,501	1,059
Secured by real-estate collateral	445	392
Qualifying revolving retail	622	536
Other retail assets	434	131
<b>TOTAL</b>	<b>7,841</b>	<b>4,464</b>

#### 4.5.4. Weightings of specialized lending exposures

The Solvency Circular stipulates that the consideration of specialized lending companies is to apply to those legal entities with the following characteristics:

- The exposure is to an entity created specifically to finance and/or operate physical assets
- The contractual arrangements give the lender a substantial degree of control

over the assets and income they generate.

- The primary source of repayment of the obligation is the income generated by the assets being financed, rather than in the independent capacity of the borrower.

The following table presents the exposures assigned to each one of the risk weightings of the specialized lending exposures as of December 31, 2012 and 2011:

(Million euros)

Risk weighting	Scale	Original exposure <sup>(1)</sup>	
		2012	2011
1	50%	0	0
	70%	7,346	7,000
2	70%	0	0
	90%	4,660	6,436
3	115%	637	85
4	250%	617	0
5	0%	718	157
<b>TOTAL</b>		<b>13,978</b>	<b>13,678</b>

(1) Gross exposure prior to the application of risk mitigation techniques.

#### 4.5.5. Risk weightings of equity exposures

The following table presents the exposures assigned to each one of the risk weightings of equity exposures as of December 31, 2012 and 2011:

(Million euros)

Risk weighting	Original exposure	
	2012	2011
<b>Risk Weighting, Simple Method</b>	<b>947</b>	<b>1,216</b>
190%	638	898
290%	194	213
370%	116	104
<b>PD/LGD Method</b>	<b>4,798</b>	<b>4,730</b>
AA	0	5
AA-	0	39
A+	0	384
A	706	55
A-	8	4,032
BBB+	3,128	0
BBB	135	85
BBB-	219	0
BB+	195	51
BB	66	0
BB-	6	9
B+	15	70
B	320	0
<b>Internal Models Method</b>	<b>489</b>	<b>480</b>
<b>TOTAL</b>	<b>6,234</b>	<b>6,426</b>

## 4.6. Information on securitizations

### 4.6.1. General characteristics of securitizations

#### 4.6.1.1. Purpose of securitization

The Group's current policy on securitization involves a program of recurrent issue, with an intended diversification of securitized assets that adjusts their volume to the Bank's capital requirements and to market conditions.

This program is complemented by all the other finance and equity instruments, thereby diversifying the need to resort to wholesale markets.

The definition of the strategy and the execution of the operations, as with all other wholesale finance and capital management, is supervised by the Assets & Liabilities Committee, with the pertinent internal authorizations obtained directly from the Board of Directors or from the Executive Committee.

The main purpose of securitization is to act as an instrument for efficient balance-sheet management, as a source of:

- Liquidity at an efficient cost, complementing all the other finance instruments.
- Freeing up regulatory capital, through the transfer of risk.

- Freeing up potential excesses of generic allowances for losses, provided that the volume of the first-loss tranche and the effective risk transfer so permit.

#### 4.6.1.2. Functions pursued in the securitization process and degree of involvement

The Group's degree of involvement in its securitization funds is not normally restricted to the mere role of assignor and administrator of the securitized portfolio.

The Group has commonly assumed such additional roles as:

- Direct counterparty of the swap, given that the Group's rating permits this through the Spanish Banking Association's Framework Contractual Agreements for Financial Operations (CMOF) with the securitization fund.
- Payment Agent.
- Provider of the treasury account.
- Provider of the subordinated loan and of the loan for start-up costs, with the former being the one that finances the first-loss tranche, and the latter financing the fund's fixed expenditure.
- Administrative agent of the securitized portfolio.

The Group has not assumed the role of sponsor of securitizations originated by third-party institutions.

The Group's balance sheet maintains the first-loss tranches of all securitizations performed.

It is worth noting that the Group has not modified its model for the generation of securitization operations since the credit crunch, which began in July 2007. Accordingly:

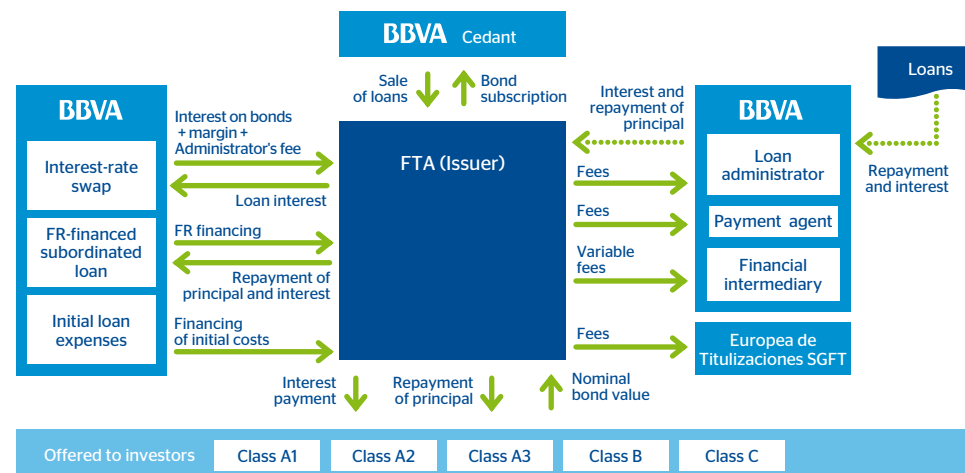
- There has been no transfer of risk through synthetic securitizations. All operations have involved traditional securitizations with simple structures in which the underlying assets were loans or financial leasing.
- It has not been involved in recurrent structures such as conduits or SIVs. All its issues have been one-offs, with no mandatory commitments for asset repackaging or the replacement of loans.

#### 4.6.1.3. Methods used for the calculation of risk-weighted exposures in its securitization activity

The methods used to calculate risk-weighted exposures in securitizations are:

- The standardized approach: when this method is used for fully securitized exposures, in full or in a predominant manner if it involves a mixed portfolio.

#### Group's degree of involvement



- The IRB approach: when internal models are used for securitized exposures, in full or in a predominant manner. Within the alternatives of the IRB approach, use is made of the model based on external ratings.

#### 4.6.2. Risk transfer in securitization activities

A securitization fulfills the criterion of significant and effective transfer of risk, and therefore falls within the solvency framework of the securitizations, when it upholds the

conditions laid down in Rules Fifty-five and Fifty-six in the Solvency Circular.

#### 4.6.3. Investment or retained securitizations

The following table presents the amounts in terms of EAD of investment and retained securitizations by type of exposure, tranche and weighting ranges that correspond to securitizations that, in the case of those originated in the Group, fulfill the criteria of risk transfer as of December 31, 2012 and 2011.

2012 (Million euros)

			EAD broken down by ECAI tranches							
			Standard			Advanced				
			40%; 50%; 100%; 225% 350%. 650%			RW<15% 15%<RW<1,250% 1,250%				
Securitization type	Exposure type	Tranche	20%	350%	650%	1,250%	RW<15%	15%<RW<1,250%	1,250%	
Investment	Balance- sheet exposure	Preferential	5,783		0	0	20		0	0
		Intermediate	0		263	0	0		578	0
		First-loss	0		0	23	0	0	0	30
	Off- balance- sheet exposure	Preferential	0		0	0	0		0	0
		Intermediate	0		0	0	0	0	0	0
		First-loss	0		0	0	0	0	0	0
TOTAL			5,783		263	23	20		578	30
Retained	Balance- sheet exposure	Preferential	24		0	0	91		0	0
		Intermediate	0		154	0	0		1,692	0
		First-loss	0		0	198	0	0	0	313
	Off- balance- sheet exposure	Preferential	0		0	0	0		0	0
		Intermediate	0		0	0	0	0	0	0
		First-loss	0		0	0	0	0	0	0
TOTAL			24		154	198	91		1,692	313

The increase observed in the exposure calculated by the standardized method is due to the incorporation of the Unnim securitizations.

The reduction in the EAD weighted at 1,250% is due to a change of criteria for these exposures, which are now deducted directly from the capital base calculated through the 50% deductions in Tier I and Tier II.

The securitizations calculated under the advanced method have increased due to the repurchases made during the year. There has also been a deterioration in the rating for securitizations based on the internal rating scale of the model, which has increased their weighted risk exposure.

2011 (Million euros)

			EAD broken down by ECAI tranches					
			Standard			Advanced		
			40%; 50%; 100%; 225% 350%. 650%			1,250%	RW<15%	15%<RW<1,250%
Securitization type	Exposure type	Tranche	20%	350%. 650%	1,250%	RW<15%	15%<RW<1,250%	1,250%
Investment	Balance-sheet exposure	Preferential	5,295	0	0	670	0	0
		Intermediate	0	90	0	0	15	0
		First-loss	0	0	175	0	0	52
	Off-balance-sheet exposure	Preferential	0	0	0	0	0	0
		Intermediate	0	0	0	0	0	0
		First-loss	0	0	0	0	0	0
TOTAL			5,295	90	175	670	15	52
Retained	Balance-sheet exposure	Preferential	304	0	0	1,175	0	0
		Intermediate	0	196	0	0	25	0
		First-loss	0	0	119	0	0	109
	Off-balance-sheet exposure	Preferential	0	0	0	0	0	0
		Intermediate	0	0	0	0	0	0
		First-loss	0	0	41	0	0	0
TOTAL			304	196	160	1,175	25	109

## 4.6.4. Originated securitizations

### 4.6.4.1. Rating agencies used

The rating agencies that have been involved in the Group's issues that fulfill the criteria of risk transfer and fall within the securitizations solvency framework are, generally, Fitch, Moody's, S&P and DBRS.

In all the SSPEs, the agencies have assessed the risk of the entire issuance structure:

- Awarding ratings to all bond tranches.
- Establishing the volume of the credit enhancement.
- Establishing the necessary triggers (early termination of the restitution period,

pro-rata amortization of AAA classes, pro-rata amortization of series subordinated to AAA and amortization of the reserve fund, amongst others).

In each and every one of the issues, in addition to the initial rating, the agencies carry out regular quarterly monitoring.

### 4.6.4.2. Breakdown of securitized balances by type of asset

The next tables give the current outstanding balance, non-performing exposures and impairment losses recognized in the period corresponding to the underlying assets of originated securitizations, in which risk transfer criteria are fulfilled, by type of asset, as of December 31, 2012 and 2011.

### 2012 (Million euros)

Asset type	Current balance	Of which: Past-due exposures <sup>(1)</sup>	Total impairment losses for the period
Commercial and residential mortgages	4,884	381	5
Credit cards	0	0	0
Financial leasing	402	32	22
Lending to corporates or SMEs	694	74	13
Consumer finance	577	45	24
Receivables	0	0	0
Securitization balances	0	0	0
Other	0	0	0
<b>TOTAL</b>	<b>6,557</b>	<b>532</b>	<b>64</b>

(1) It includes the total amount of exposures impaired for reasons of default or for other reasons.

### 2011 (Million euros)

Asset type	Current balance	Of which: Past-due exposures <sup>(1)</sup>	Total impairment losses for the period
Commercial and residential mortgages	5,249	460	6
Credit cards	0	0	0
Financial leasing	575	56	0
Lending to corporates or SMEs	1,021	100	23
Consumer finance	1,009	75	12
Receivables	0	0	0
Securitization balances	0	0	0
Other	0	0	0
<b>TOTAL</b>	<b>7,855</b>	<b>693</b>	<b>41</b>

(1) It includes the total amount of exposures impaired for reasons of default or for other reasons.

The Group has not securitized positions in revolving structures.

In 2012 and 2011, there were no securitizations that fulfill the transfer criteria according to the requirements of the Solvency Circular, and, therefore, no results were recognized.

BBVA has been the structurer of all transactions effected since 2006 (Unnim transactions excluded).

The next table gives the current outstanding balance of underlying assets of securitizations originated by the Group, in which risk transfer criteria are **not** fulfilled. These therefore do not enter within the solvency framework of securitizations; the capital exposed is calculated as if they had not been securitized:

The fall on the previous year is due to the repurchases made during the year.

### (Million euros)

Asset type	Current balance	
	2012	2011
Commercial and residential mortgages	11,414	23,684
Credit cards	0	0
Financial leasing	31	18
Lending to corporates or SMEs	5,509	6,285
Consumer finance	1,300	1,933
Receivables	0	0
Securitization balances	0	0
Covered bonds	4,402	0
Other	96	124
<b>TOTAL</b>	<b>22,752</b>	<b>32,044</b>

## 4.7. Information on credit risk mitigation techniques

### 4.7.1. Hedging based on netting operations on and off the balance sheet

Within the limits established by the rules on netting in each one of its operating countries, the Group negotiates with its customers the assignment of the derivatives business to master agreements (e.g., ISDA or CMOF) that include the netting of off-balance sheet transactions.

The text of each agreement in each case determines the transactions subject to netting.

The mitigation of counterparty risk exposure stemming from the use of mitigation techniques (netting plus the use of collateral agreements) leads to a reduction in overall exposure (current market value plus potential risk).

### 4.7.2. Hedging based on collaterals

#### 4.7.2.1. Management and valuation policies and procedures

The procedures for the management and valuation of collateral are included in the Policies and Procedures for Retail and Wholesale Credit Risk.

These Policies and Procedures lay down the basic principles of credit risk management,

which includes the management of the collaterals assigned in transactions with customers. Accordingly, the risk management model jointly values the existence of an adequate cash flow generation by the obligor that enables him to service the debt, together with the existence of suitable and sufficient guarantees that ensure the recovery of the credit when the obligor's circumstances render him unable to meet their obligations.

The valuation of collateral is governed by prudential principles. They imply the use of appraisals for real-estate guarantees, stock-market price for shares, trading price of shares in mutual funds, etc. Under these prudential principles, milestones are established, in accordance with local regulations, under which guarantee valuations should be updated.

With respect to the entities that carry out the valuation of the collateral, principles are in place in accordance with local regulations that govern their level of relationship and dependence with the Group and their recognition by the local regulator. These valuations will be updated by statistical methods, indices or appraisals of goods, which shall be carried out under the generally accepted standards in each market and in accordance with local regulations. All collaterals assigned are to be properly instrumented and recorded in the

corresponding register, as well as receiving the approval of the Group's legal units.

#### 4.7.2.2. Types of collaterals

As collateral for the purpose of calculating equity, the Group uses the coverage established in the Solvency Circular. The following are the main collaterals available in the Group:

- **Mortgage collateral:** The collateral is the property upon which the loan is arranged.

The weighted average outstanding balance on the corresponding mortgage loans was 51% of the value of the collateral as of December 31, 2012, and 52% as of December 31, 2011.

- **Financial guarantees:** Their object is any one of the following financial assets, as per the specifications of Rule Thirty-nine in the Solvency Circular:

- Cash deposits, deposit certificates or similar securities.
- Debt securities issued for the different categories.
- Shares or convertible bonds.

- **Other property and rights used as collateral:** The following property and

rights are considered to be acceptable as collateral:

- Cash deposits, deposit certificates or similar instruments held in third-party institutions other than the lending credit institution, when these are pledged in favor of the latter.
- Life insurance policies pledged in favor of the lending credit institution.
- Debt securities issued by other institutions, provided that these securities are to be repurchased at a pre-set price by the issuing institutions at the request of the holder of the securities.

The exposures covered by financial collateral and other eligible collaterals eligible under the advanced measurement approach stand at €80,008 million and €65,071 million as of December 31, 2012 and 2011, respectively.

The value of the exposure covered with financial collateral and other collateral calculated using the standardized approach is as follows:

## 2012 (Million euros)

Categories of exposure	Types of Collateral		
	Exposure covered by financial collaterals	Exposure covered by other eligible collaterals	Eligible collateral of a financial nature after volatility adjustments
Central governments and central banks	0	0	15,270
Regional governments and local authorities	19	32	0
Public-sector institutions and other public entities	241	0	30
Institutions	671	1	51
Corporates	2,038	257	334
Retail	1,043	167	579
Collateralized with real-estate property	38	1,115	14
Default status	55	27	10
High risk	0	4	10
Mutual funds	11	0	0
Other exposures	0	0	7
<b>TOTAL EXPOSURE VALUE AFTER GUARANTEES</b>	<b>4,115</b>	<b>1,602</b>	<b>16,306</b>

## 2011 (Million euros)

Categories of exposure	Types of Collateral		
	Exposure covered by financial collaterals	Exposure covered by other eligible collaterals	Eligible collateral of a financial nature after volatility adjustments
Central governments and central banks	2	0	30,091
Regional governments and local authorities	17	28	0
Public-sector institutions and other public entities	1	0	4
Institutions	0	1	0
Corporates	356	353	397
Retail	713	116	0
Collateralized with real-estate property	0	767	4
Default status	0	6	1
High risk	0	7	5
Other exposures	0	0	14
<b>TOTAL EXPOSURE VALUE AFTER GUARANTEES</b>	<b>1,088</b>	<b>1,278</b>	<b>30,518</b>

The reduction in the amount of financial collateral in the central government and central bank category corresponds to the

reduction in the balances of repo liabilities already commented in earlier chapters.

## 4.7.3. Hedging based on personal guarantees

According to the Solvency Circular, **signature guarantees** are personal guarantees, including those arising from credit insurances, that have been awarded by the providers of coverage defined in Rule Forty in the Solvency Circular.

(Million euros)

Categories of exposure	Exposure covered by personal guarantees	
	2012	2011
Regional governments and local authorities	2,307	1,930
Public-sector institutions and other public entities	11	101
Institutions	69	30
Corporates	3,603	2,665
Retail	1,357	1,273
Collateralized with real-estate property	1,648	538
Default status	748	49
High risk	144	11
Other exposures	1,468	1
<b>TOTAL EXPOSURE UNDER STANDARDIZED APPROACH COVERED BY PERSONAL GUARANTEES</b>	<b>11,356</b>	<b>6,599</b>
Central governments and central banks	497	429
Institutions	592	526
Corporates	6,043	6,220
<b>TOTAL EXPOSURE UNDER ADVANCED MODEL COVERED BY PERSONAL GUARANTEES</b>	<b>7,132</b>	<b>7,175</b>
<b>TOTAL</b>	<b>18,488</b>	<b>13,74</b>

The increases on the previous year correspond basically to Unnim.

## 4.7.4. Risk concentration

Within the context of credit risk mitigation operations, there are no concentrations

As of year-end 2012 and 2011, the Group did not use credit derivatives as collateral.

In the category of Retail exposure under the advanced measurement approach, guarantees impact on the PD and do not reduce the amount of the credit risk in EAD.

The total value of the exposure covered with personal guarantees is as follows:

of counterparty risk, given the risk management policies applied and the netting and collateral agreements entered into with the main counterparties.



## 5. Market risk in trading book activities

### 5.1. Differences in the trading book for the purposes of applying the Solvency and the Accounting Circulars

According to Rule Eighty-Three of Bank of Spain Circular 3/2008 ("Composition of the trading book"), "the trading book shall be made up of all the positions in financial instruments and commodities that the credit institution maintains for the 'purpose of trading' or that act as hedging for other elements in this book."

With respect to this book, the rule also refers to the need to establish clearly defined policies and procedures.

For this purpose, regulatory trading book activities defined by the BBVA Group include the positions managed by the Group's Trading units, for which market risk limits are set and then monitored daily. Moreover, they comply with the other requirements defined in the solvency regulations.

The trading book as an accounting concept is not confined to any business area, but rather follows the true reflection criteria laid down in the accounting regulations. Included

in this category are all the financial assets and liabilities originated, acquired or issued with the aim of short-term redemption or repurchase, whether they are part of a jointly-managed portfolio of instruments for which there is evidence of recent action to obtain short-term gains, or derivative instruments that do not comply with the definition of a collateral contract and have not been designated as hedge accounting instruments. Hence, for example, all derivatives are booked as accounting trading

book unless they are hedging derivatives, regardless of whether or not they are part of the Trading units' exposure or they come from other business areas.

### 5.2. Internal models

#### 5.2.1. Scope of application

For the purposes of calculating own funds, the scope of application of the internal model for market risk extends to BBVA S.A. and BBVA Bancomer Trading Floors.

a forecast of the maximum loss that can be incurred by trading portfolios in a one-day horizon, with a 99% probability, stemming from market fluctuations of the aforementioned factors. It uses a historical period of 2 years of observations of the risk factors.

(since 2007). Together, the two account for around 80-90% of market risk in the Group's trading portfolio. Furthermore, and following guidelines established by Spanish and European regulators, BBVA includes additional metrics to comply with the regulatory requirements issued by the Bank of Spain. The new market risk measures for the trading portfolio include the calculation of the stressed VaR (to quantify the risk level in extreme historical conditions), the quantification of non-performing risks, and

of downgrade risks in the rating of some positions held in the portfolio, such as bonds and credit derivatives; they also quantify securitization and correlation portfolio charges, using the standard model.

#### 5.2.2. Features of the models used

The basic measurement model used is that of value-at-risk (VaR), which provides

The Bank of Spain has authorized the use of the internal model to calculate the capital risk positions of the trading portfolios of BBVA S.A. (since 2004) and BBVA Bancomer

The market-risk limits model currently in force consists of a system of VaR (Value at Risk) and economic capital limits and VaR sub-limits, as well as stop-loss limits for each of the Group's business units. The global limits are proposed by the Corporate

GRM area and approved by the Executive Committee on an annual basis, after they have been submitted to the Board's Risk Committee.

This limits structure is developed by identifying specific risks by type, trading activity and trading desk. The market risk units maintain consistency between the limits. This system of limits is supplemented by measures of the impact of extreme market movements on risk positions. Currently the stress analysis is carried out on the basis of historical crisis scenarios. The benchmark historical scenario is the Lehman bankruptcy in 2008. The economic crisis scenario is updated monthly and is carried out ad hoc for each of the BBVA Group's treasuries. The most significant market risk positions are identified in this scenario and an evaluation is made of the impact that movements in market variables may have on the positions.

BBVA continues its work to improve and enrich the information provided by stress exercises. It prepares scenarios that aim to detect what possible combinations of impacts in terms of market variables may significantly affect the result of trading portfolios. It complements the information provided by VaR and the historical scenarios and works as an alert indicator that complements the normal risk measurement and control policies.

In order to assess business unit performance over the year, the accrual of negative earnings is linked to the reduction of the VaR limits that have been set. The control structure in place is supplemented by limits on loss and a system of alert signals to

anticipate the effects of adverse situations in terms of risk and/or result. All the tasks associated with stress testing, methodologies, scenarios of market variables and reports are coordinated between the Group's various Risk Areas.

Finally, the market risk measurement model includes backtesting, *or ex-post comparison*, which helps to refine the accuracy of the risk measurements by comparing day-on-

day results with their corresponding VaR measurements.

Value at Risk (VaR) is the basic variable for managing and controlling the Group's market risk. This risk metric estimates the maximum loss that may occur in a portfolio's market positions for a particular time horizon and given confidence level. VaR is calculated in the Group at a 99% confidence level and a one-day time horizon.

As mentioned before, both BBVA S.A. and BBVA Bancomer have received approval from the Bank of Spain to use an internal model developed by the BBVA Group to calculate bank capital requirements for market risk. This model estimates the VaR in accordance with the "historical simulation" methodology, which consists of estimating the losses and gains that would have been produced in the current portfolio if the changing market conditions that occurred over a determined period of time were repeated. Based on this information, it infers the maximum foreseeable loss in the current portfolio with a given level of confidence. The model has the advantage of accurately reflecting the historical distribution of the market variables and of not requiring any specific distribution assumption. The historical period used in this model is two years.

In addition, and for the purposes of calculating the capital requirements for financial instruments held for trading, the Group has since 2011 incorporated the new Basel 2.5 requirements, which has had an impact in terms of an increase in capital charges. Specifically, these new charges include:

1. **Incremental Risk Charge (IRC):** Calculates the risk not captured by the VaR model, specifically migration and default events.
2. **VaR Stress:** Gives a VaR figure using parameters calculated in a period of stress conditions.
3. **Charge on securitization portfolio:** The specific risk will be calculated according to the standard method rules, i.e. the same

#### BBVA, S.A. market risk



#### BBVA Bancomer market risk



capital charge as a position in the banking book.

#### 4. Capital charge on correlation portfolio:

The risk is calculated by the standard method and supervisory formula. The perimeter of this charge is referred to

Nth-to-default market positions and/or market tranches, and only for positions with an active market and hedging capacity.

Below is the breakdown of capital requirements for BBVA, S.A. and BBVA Bancomer models:

#### 2012 (Million euros)

Capital requirement by market risk				
Advanced Model	CR (VaR)	CR (sVaR)	IRC	Total
Spain	160	165	124	449
Mexico	54	150	39	243
<b>Total</b>	<b>214</b>	<b>315</b>	<b>163</b>	<b>693</b>

#### 2011 (Million euros)

Capital requirement by market risk				
Advanced Model	CR (VaR)	CR (sVaR)	IRC	Total
Spain	155	193	93	441
Mexico	48	142	57	247
<b>Total</b>	<b>202</b>	<b>336</b>	<b>150</b>	<b>688</b>

By type of market risk on the trading book, the main risk in BBVA S.A. is interest-rate and spread risk, at 77% of the total at the end of 2012; equity risk accounts for 2%, exchange-rate risk 3% and volatility risk 18%.

The following tables show VaR by risk factor for BBVA S.A. and BBVA Bancomer:

#### BBVA, S.A. market risk

(Million euros)

Risk	31-12-2012
Interest + Spread	26.3
Exchange rate	1.2
Equity	0.7
Volatility and correlation	6.2
Diversification effect	(15.2)
<b>TOTAL</b>	<b>19.2</b>
<b>2012 AVERAGE</b>	<b>13.8</b>
<b>2012 MAXIMUM</b>	<b>21.7</b>
<b>2012 MINIMUM</b>	<b>8.1</b>

#### BBVA Bancomer market risk

(Million euros)

Risk	31-12-2012
Interest + Spread	5.7
Exchange rate	1.1
Equity	1.8
Volatility and correlation	2.7
Diversification effect	(4.1)
<b>TOTAL</b>	<b>7.3</b>
<b>2012 AVERAGE</b>	<b>5.1</b>
<b>2012 MAXIMUM</b>	<b>9.1</b>
<b>2012 MINIMUM</b>	<b>3.4</b>

VaR figures are estimated following two methodologies:

- VaR without smoothing, which awards equal weight to the daily information for the previous two years. This is currently the official methodology for measuring market risks vis-à-vis limits compliance.
- VaR with smoothing, which weighs more recent market information more heavily. This metric is supplementary to the one above.

VaR with smoothing adapts itself more swiftly to the changes in financial market conditions, whereas VaR without smoothing is, in general, a more stable metric that will tend to exceed VaR with smoothing when the markets show less volatile trends, but be lower when they present upturns in uncertainty.

### 5.2.3. Stress testing

All the tasks associated with stress, methodologies, scenarios of market variables or reports are undertaken in coordination with the Group's Risk Areas.

Currently the stress analysis is carried out on the basis of historical crisis scenarios. The benchmark historical scenario is the bankruptcy of Lehman in 2008. Once the critical period to be used has been defined, the behavior of risk factors is applied to reevaluate the current portfolio in order to estimate the loss that would be incurred if this market situation were to be repeated.

#### Impact on earnings in Lehman scenario

(Million euros)

	31-12-2012	31-12-2011
GM Europe	-9	-42
GM Bancomer	-82	-21
GM Argentina	-1	-2
GM Chile	-8	-4
GM Colombia	-2	-1
GM Peru	-8	-6
GM Venezuela	-4	-3

A new methodology for calculating stress scenarios: The historical stress exercises are supplemented with the use of a simulation process to design stress scenarios that can significantly impact the current portfolio at any time. Unlike the historical scenarios, which are fixed and thus do not adapt to the composition of portfolio risks at any given time, these scenarios are dynamic and are

recalculated regularly according to what the principal risks in the trading portfolios are. The exercise therefore starts with the most relevant sensitivities in the portfolio and takes a historical view of the risk factors beginning in 2008, selecting the 500 consecutive days that were the greatest stress for this portfolio. A simulation exercise is then carried out in this stress window by the re-sampling of historical observations. This generates a 20-day distribution of gains and losses that allows an analysis of extreme events. The advantage of this methodology is that the stress period is not pre-established, but rather a function of the portfolio; and the large number of simulations mean that the expected shortfall analysis can include richer information than that available in scenarios included in the VaR calculation. This methodology is in place at BBVA, S.A. and Bancomer, and will be gradually transferred to the remaining geographical areas.

## 5.2.4. Backtesting

The Group's market risk measurement model needs to have a backtesting or self-validation program that assures that the risk measurements being made are appropriate.

The Global Markets Risk unit periodically approves the risk valuation models used to estimate the maximum loss that could be incurred in the positions assessed with a certain level of probability. If it is noticed that the model does not match the real results of the positions in question, checks would need to be run to offset possible errors, or changes made to improve the accuracy of the estimate.

The approval of the VaR measurement system is performed by comparing the ex-ante risk levels provided daily by the model with the real, ex-post management

results calculated by the Financial Division from the business units' management systems. Consistency between the results obtained and resulting risk level is verified.

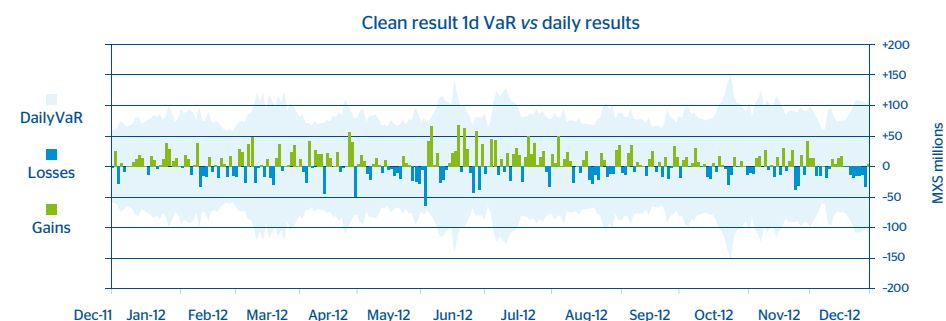
In 2012, portfolio losses at BBVA S.A. were only greater than the daily VaR on one occasion, thus validating the correct operation of the model over the period, in line with the Basel criteria:

- July 24: This was a global trading desk exception generated exclusively due to a negative result produced on the equity trading desk. On that day, Telefónica announced it would not pay a dividend in 2012 and cut the shareholder payout in 2013 and subsequent years by 50%.

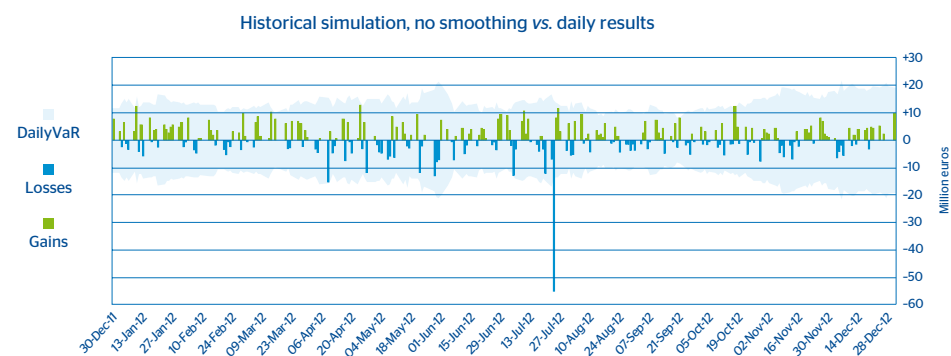
No exception to the model occurred at BBVA Bancomer in 2012.

## BBVA Bancomer. Backtesting

(December 2012)



## Validation of the market risk measurement model for BBVA, S.A. with management results (EUR base)



### 5.2.5. Characteristics of the risk management system

The Group has a risk management system that is appropriate for the volume of risks managed, in compliance with the conditions laid out in Rule Ninety-three:

- Integration of the daily risk calculations into the Group's risk management.
- A Risk unit that is independent of the business units.
- Active participation of management bodies in the risk control process.
- Sufficient human resources to employ the model.
- Existence of written procedures that assure the global precision of the internal model used for calculating VaR.
- Accreditation of the degree of accuracy of the internal model used for calculated VaR.
- Existence of a stress program.
- Periodic internal audits performed on the risk measurement system.

The Group employs a backtesting program that ensures that the risk measurements carried out are appropriate.

The Group uses internal validation procedures for the model that are independent of the model development process.

VaR is calculated at a 99% confidence level and a 1-day time horizon. In order to extrapolate to the regulatory 10-day horizon, the figures are multiplied by the square root of 10. A historical period of 2 years is used for risk factor observation.

The market risks model has a sufficiently large number of risk factors, according to the business volume in the various financial markets.

## 6. Operational risk

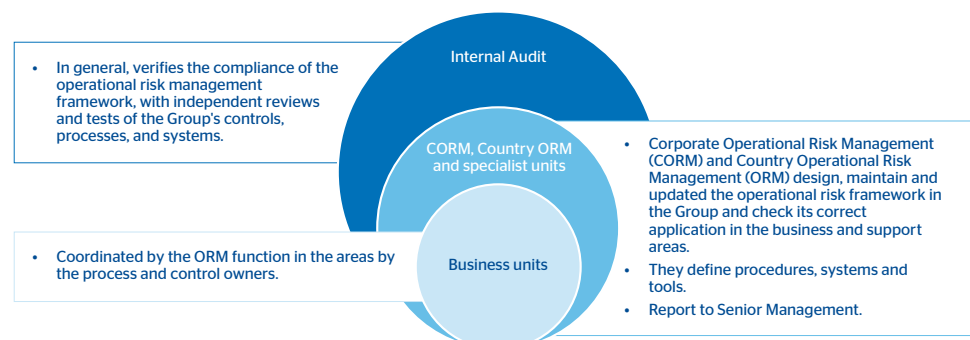
Operational risk is defined as the risk that could potentially cause losses due to human error, inadequate or faulty internal processes, system failures or external events.

In 2012, an integrated internal control and operational risk methodology was implemented throughout the Group as a development of the self-evaluation tool Ev-Ro. This methodology identifies risks in organizational areas, generates exercises that prioritize risks according to the estimated residual risk (after incorporating control effects), links risks to processes and establishes an objective risk level for each risk type to identify and manage gaps by comparing it with the residual risk level.

The Group has developed a new corporate application to provide the required support for this methodology: STORM (Support Tool for Operational Risk Management), which includes modules of indicators and scenarios.

The operational risk management framework defined for the BBVA Group includes a governance structure based on: three lines of defense with clear specification of responsibilities; policies and procedures that are common to the whole Group; systems for identifying, measuring, monitoring, controlling and mitigating operational risks and losses; and tools and methodologies that quantify operational risk in terms of capital.

### Operational risk management framework: three lines of defense



### Characteristics of BBVA's operational risk management model

Soundness	Board - Holding - Country - Unit
Depth	Model created in 1999 using database since 2002
Integrated in the management	Capital, budgets, incentives, internal benchmark, culture
Forward-looking	Uses future variables for analysis, calculation and mitigation
Focus on anticipating what is important	Identifies and prioritizes relevant risks in order to mitigate them
Continuous improvement	Best practices function and continuous updating

BBVA's operational risk management model is designed and coordinated by the Corporate Operational Risk Management function, which is part of Global Risk Management, and the Operational Risk Management (ORM) units, which are located in the Risks units of different countries and business areas. The business or support areas have operational risk managers who answer functionally to them, and are responsible for implementing the model in the day-to-day operations of the areas. This gives the Group a view of risks at the process level, where risks are identified and prioritized and mitigation decisions are made. Following a bottom up approach, this system enables a general view in each level.

To carry out this task, BBVA has several tools already running that cover both qualitative and quantitative aspects of operational risk:

- Operational Risk management tool:** The new corporate tool STORM was implemented throughout the Group in 2012. At the same time, the Ev-Ro exercises were updated for the last time at the start of 2012 and were used as a benchmark for the mitigation of risks at the Operational Risk Management committee meetings of the business and support units held during the year.
- Indicators:** During 2012 and at the start of 2013 the old indicator tool TransVaR

was transformed into indicators anchored in the main residual risks and their controls. The new model forms part of the STORM tool. The indicators measure the development of risks and their controls over time, generate alert signals, and provide an ongoing measurement of the effectiveness of controls.

- **SIRO:** Operational risk events nearly always have a negative impact on the Group's income statements. To keep these events under control, they are recorded in a database called SIRO. To ensure reliability, 95% of its inputs are fed directly from accounting data through automatic interfaces. The internal SIRO data are supplemented with information from an external database at the Operational Risk Exchange (ORX) consortium. ORX is a non-profit association founded by twelve international banks in 2002 and currently has 65 members in 18 countries.

The Group has additional tools to assist in handling the data for calculating capital and making other necessary estimations.

The operational risk events are classified according to the risk categories established

by Basel II: processes, fraud (internal and external), IT, human resources, commercial practices, disasters and suppliers.

Spain and Mexico quantifies operational risk using internal models based on the Loss Distribution Approach methodology: distribution of losses determined by convoluting the frequency LGD distribution of operational events, considering a one-year period and a confidence level of 99.9%. The methodology to calculate capital using internal models involves databases of internal operational events, external databases, scenarios and several business environment factors and internal control.

In 2010, the Bank of Spain authorized the Advanced Measurement Approach (AMA) to calculate the capital requirements, consolidated by operational risk in Spain and Mexico, where most of the Group's assets are allocated. BBVA is as of this date the only bank authorized by the Bank of Spain to apply advanced models to calculate capital requirements by operational risk. While the basic model is still applied exceptionally, the standard model is used to calculate capital in the rest of the geographical areas.

## Admission of operational risk

In 2012 the Corporate Operational Risk management function has revised the admission stage of operational risk, leading to its restructuring.

First, it dealt with the appetite for operational risk, which will be implemented gradually with a top-down perspective. In 2013 it implemented Phase I, with the first loss indicators, and the complete framework will be complete in 2014.

It has also identified the sources of operational risk for which the policies and procedures that manage admission of this risk have to be revised. The sources of operational risk subject to review are: approval of new risks and new products and services; outsourcing; and implementation of new systems and new processes.

The first result of this review of sources of admission was that in 2012 the Global Corporate Risk Management unit prepared a new procedure for approving new businesses, products and services, whose full implementation will be complete in 2013. With this new procedure, BBVA has

integrated operational risk management further into the Group's day-to-day operations, and adopted the best practices and recommendations made recently by European bodies and regulators. The improvements introduced for approval of businesses, products and services are:

- A clearer distinction between business and product and/or service.
- A simpler governance, made up of committees with a broader level of representation that combines the global vision of businesses and products in the business and geographical areas.
- A definition of the stages and tasks that the approval processes have to comply with, as well as the people responsible for carrying them out.
- Stronger monitoring of new businesses and products after their approval.
- A key role for the operational risk function, as coordinator and guarantor of the application of the criteria and processes, and for the different specialists involved, who take decisions within their field of expertise.

## 6.1. Methods employed

In keeping with the Solvency Circular, advanced models (the AMA method) are used in a significant portion of the banking perimeter to calculate the regulatory capital for operational risk under Pillar I. Specifically, this method is used in Spain and Mexico. For the rest of the Group, the calculation is carried out by applying the basic or standardized approach, as required, to the

relevant consolidated income from the remaining subsidiaries.

As mentioned before, in March 2010 the BBVA Group received authorization from the Bank of Spain to apply advanced models for calculating regulatory capital by operational risk in Spain and Mexico. This made it the only financial institution

to date to obtain the Bank of Spain's classification for advanced operational risk models.

Until December 2011, the Group maintained a capital requirement floor in place for the results of its internal model to ensure they did not fall below the requirements of the standard operational risk model. Given the

positive performance of the internal model since its approval, the Group requested that the Bank of Spain withdraw the floor referred to. Since the close of 2011, the Group has calculated its capital requirements without the floor, although with what is still a partial recognition of the effect of diversification, which gives rise to more conservative estimates.

## 6.2. Description of the advanced measurement approaches

The advanced internal model follows the LDA (Loss Distribution Approach) methodology. This methodology estimates the distribution of losses by operational event by convoluting the frequency distribution and the loss given default distribution of these events.

The calculations have been made using internal data on the Group's historic losses as its main source of information. External databases (ORX consortium) have been employed to enrich the data from this internal database and to take account of the impact of possible events not yet considered therein; scenario simulations have also been included using information from the Group's operational risk self-assessment tool.

The distribution of losses is constructed for each of the different types of operational risk, which are defined as per Basel Accord cells; i.e. a cross between business line and risk class. In those cases in which there

is not sufficient data for a sound analysis, it becomes necessary to undertake cell aggregations, and to do so the business line is chosen as the axis. In certain cases, a greater disaggregation of the Basel cell has been selected. The objective consists of identifying statistically homogenous groups and a sufficient amount of data for proper modeling. The definition of these groupings is regularly reviewed and updated.

The Solvency Circular establishes that regulatory capital for operational risk is determined as the sum of individual estimates by type of risk, but allowing the option of incorporating the effect of the correlation among them. This impact has been taken into consideration in BBVA estimates with a conservative approach.

The model of calculating capital in both Spain and Mexico incorporates factors that reflect the business environment and situation of

internal control systems. Thus the calculation obtained is higher or lower according to how these factors change in order to anticipate the possible impacts.

With regards to other factors included in the Solvency Circular, current estimates do not include the mitigation effect provided by insurance activities; however, an analysis is being carried out of whether said effect should be included in the future.

Finally, the capital resulting from the application of the advanced models is adjusted by factors related to the environment of the country and by internal control factors that depend on the level of mitigation of the weaknesses identified by the controls.

The table below shows the capital requirements of Operational Risk broken down according to the calculation models:

(Million euros)

Regulatory capital for operational risk	2012	2011
Advanced	1,333	1,325
Spain	782	799
Mexico	551	525
Standard	867	878
Basic	205	145
<b>BBVA Group total</b>	<b>2,405</b>	<b>2,348</b>

The increased capital requirement is mainly due to the acquisition of Unnim.

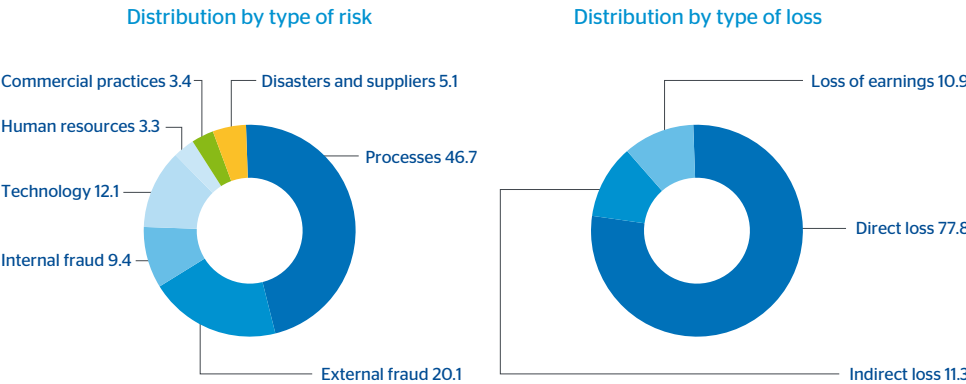


### 6.3. The Group's operational risk profile

The two charts below show the operational risk profile of BBVA by risk class: distribution of evaluated risk, and distribution of historical operational losses.

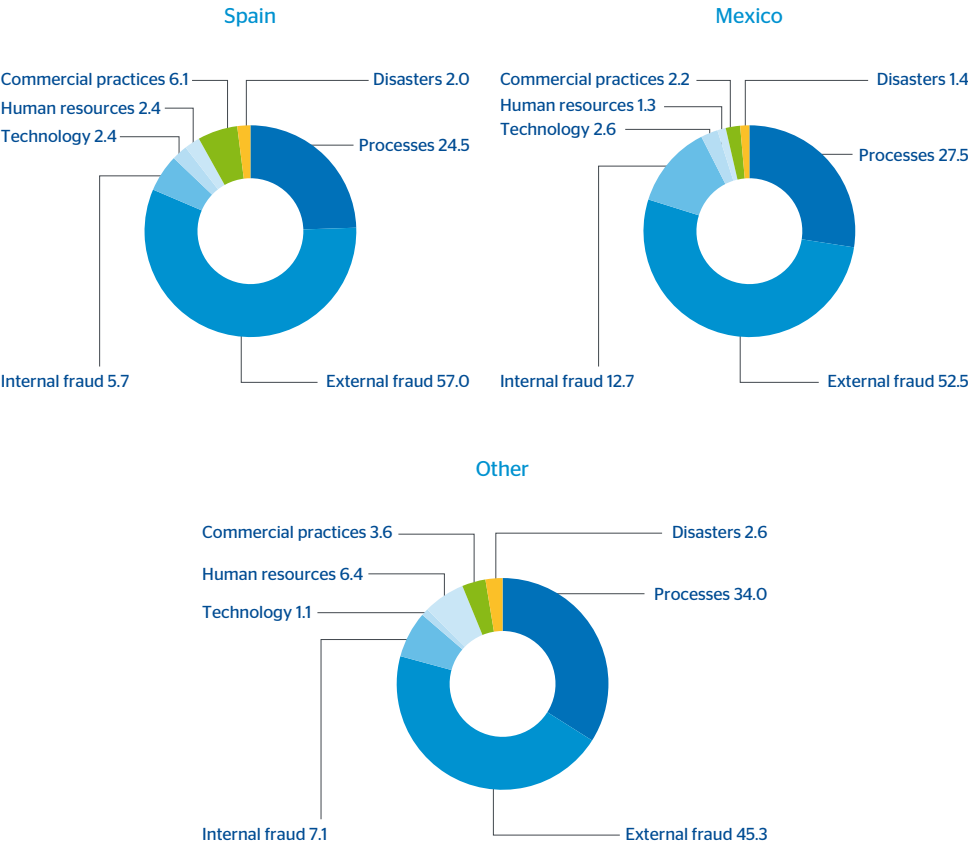
#### BBVA Group. Risk assessed with the Ev-Ro tool

(Percentage)



#### Distribution of historical operational losses

(Percentage)



## 7. Investments in capital instruments not included in the trading book

### 7.1. Differentiation between portfolios held for sale and those held for strategic purposes

#### 7.1.1. Portfolios held for sale

The portfolio held for sale is reflected in accounting terms by the “available-for-sale assets” entry. In the case of capital instruments, this portfolio will include the capital instruments of institutions that are not strategic, that are not classified as the Group’s subsidiaries, associates, or jointly controlled entities, and that have not been included in the fair value through profit or loss category.

#### 7.1.2. Portfolios held for strategic purposes

The portfolio held for strategic purposes is included for accounting purposes under the heading of available-for-sale financial assets. An investment in capital instruments is considered strategic when it has been made with the intent of setting up or maintaining a long-term operating relationship with the subsidiary, although

there is no significant influence on it, if at least one of the following situations is in place:

- Representation on the Board of Directors or equivalent management body in the subsidiary.
- Participation in the policy setting process, including those related to dividends and other payouts.

- The existence of significant transactions between the investing institution and the subsidiary.
- The exchange of senior management staff.
- The supply of expert information of an essential nature.

### 7.2. Accounting policies and instrument valuation

The financial instruments contained in the available-for-sale financial assets portfolio are valued at their fair value both in their initial entry and on subsequent valuations. Said changes are recorded in equity unless objective evidence exists that the fall in value is due to asset impairment where the amounts recorded will be written-off from

equity and they will be taken directly to the income statement.

The fair value is the amount for which an asset could be made over or a liability cancelled, between duly informed interested parties in a transaction carried out in conditions of mutual independence. The fair value is reached

without making any deduction for transaction costs that might be incurred due to sale or disposal by other means.

In the initial entry, the best evidence of fair value is the listing price on an active market. When these prices are not available, recent transactions on the same instrument will be

consulted or valuation techniques based solely on data observable in the market will be used.

In subsequent valuations, fair value will be obtained by one of the following methods:

- Prices quoted on active markets for the same instrument, i.e., without modification or reorganizing in any way.

- Prices quoted on active markets for similar instruments or other valuation techniques in which all the

meaningful inputs are used based on directly or indirectly observable market data.

- Valuation techniques in which some meaningful input is not based on observable market data.

When it is not possible to reliably estimate a capital instrument's fair value, it will be valued at its cost.

## 7.3. Book value of equity investments

The accompanying table shows the book values of portfolios held for sale and those held for strategic purposes:

The fair value of the permanent investment portfolio, calculated on the basis of the official

trading price of the listed companies, was €2,136 million and €1,779 million below the book value as of December 31, 2012 and 2011, respectively.

(Million euros)

Item	Book value			Total
	Permanent investment portfolio <sup>(1)</sup>	Available-for-sale financial assets	Other financial assets with changes in P&L	
31/12/2011	7,941	5,139	556	13,637
31/12/2012	6,795	3,965	2,076	12,836

(1) It includes investments in associates and jointly-controlled entities.

## 7.4. Exposure in equity investments and capital instruments

The accompanying table shows the types, nature and amounts of the original exposures in equity investments listed

or unlisted on a stock market, with an item differentiating sufficiently diversified portfolios and other unlisted instruments.

The amount of profits recorded as a result of the sale or liquidation of capital instruments or equity investments was €49 million as of December 31, 2012 and €108 million as of

December 31, 2011. The amounts recorded in equity were a loss of €125 million as of December 31, 2012 and a profit of €372 million as of December 31, 2011.

2012 (Million euros)

Item	Type of exposure <sup>(1)</sup>	
	Non-derivatives	Derivatives
Exchange-traded instruments	3,547	94
Non-exchange traded instruments	2,608	-15
Included in sufficiently diversified portfolios	2,608	-15
Other non-traded instruments	0	0
<b>TOTAL EQUITY POSITIONS</b>	<b>6,155</b>	<b>79</b>

(1) Depending on their nature, equity instruments not included in Trading Book Activity will be separated into derivatives and non-derivatives. The amount shown refers to original exposure, i.e. gross exposure of value corrections through asset impairment and provisions, before applying risk mitigation techniques.

2011 (Million euros)

Item	Type of exposure <sup>(1)</sup>	
	Non-derivatives	Derivatives
Exchange-traded instruments	4,434	27
Non-exchange traded instruments	1,974	-10
Included in sufficiently diversified portfolios	1,974	-10
Other non-traded instruments	0	0
<b>TOTAL EQUITY POSITIONS</b>	<b>6,409</b>	<b>17</b>

(1) Depending on their nature, equity instruments not included in Trading Book Activity will be separated into derivatives and non-derivatives. The amount shown refers to original exposure, i.e. gross exposure of value corrections through asset impairment and provisions, before applying risk mitigation techniques.

# 8. Interest rate risk

## 8.1. Nature of interest rate risk and key hypotheses

The Group's exposure to variations in market interest rates is one of the main financial risks linked to the pursuit of its banking operations. The risk of repricing, which stems from the difference between the periods for reviewing interest rates or the maturity of investment transactions vis-à-vis their financing, constitutes the basic interest rate risk to be considered. Nonetheless, other risks such as the exposure to changes in the slope and shape of interest-rate curves and the risk of optionality present in certain banking transactions are also taken into consideration by risk control mechanisms.

The sensitivity measurements of the Group's net interest income and economic value in the face of variations in market interest rates are complemented by forecast scenarios and risk measurements using curve simulation processes, thereby allowing an assessment of the impact changes have on the slope, curvature and parallel movements of varying magnitude.

Especially important in the measurement of structural interest rate risk, which is carried out every month, is the establishment

of hypotheses on the evolution and performance of certain items on the balance sheet, especially those involving products with no explicit or contractual due date.

The most significant of these hypotheses are those established on current and savings accounts, since they largely condition risk levels given the volume they represent within the liabilities of the Group's financial institutions.

A prior step to the study of these liabilities necessarily involves "account segmentation." To do so, the balances on the balance sheet are broken down by products, analyzed separately and subsequently grouped according to their common features, especially with regard to the type of customer and the criteria on the remuneration of each account, independently of the accounting standards on grouping.

A first stage involves analyzing the relationship between the trends in market interest rates and the interest rates of those accounts with no contractual due date. This relationship is established by means

of models that show whether the account's remuneration can be considered either fixed-rate (there is no relationship between the two variables) or variable-rate. In this latter case, an assessment is made of whether this relationship is produced with some form of delay and what the percentage impact of the variations in market interest rates is on the account's interest rate.

Subsequently, an analysis is made of the changes over time of the balances in each category in order to establish their overall trend against the seasonal variations in the balance. It is assumed that these seasonal variations mature in the very short term, whereas the trend in the balance is assigned a long-term maturity. This prevents oscillations in the level of risks caused by momentary variations in balances, thus favoring the stability of balance-sheet management. This breakdown of amounts is made by the regressions that best adjust historical changes to the balance over time.

Group companies have opted for different procedures to determine the maturity of transactional liabilities, taking into account the

varying nature of markets and the availability of historical data. In the case of the Group, a descriptive analysis of the data is used to calculate the average contractual period of the accounts and the conditioned probability of maturity for the life cycle of the product. A theoretical distribution of maturities of the trend balance is then estimated for each of the products, based on the average life of the stock and the conditioned probability.

A further aspect to be considered in the model's hypotheses is the analysis of the prepayments associated with certain positions, especially with the loan-book and mortgage portfolios. Changes in market interest rates, together with other variables, condition the incentives for the bank's customers to make an early prepayment of the loan granted, thus modifying the calendar of payments initially specified in the contract.

The analysis of historical information relating to loan prepayments, and to changes in interest rates, establishes the relationship between the two at any particular moment and estimates future prepayment in a given interest-rate scenario.

## 8.2. Variations in interest rates

The following tables present the average levels of interest rate risk in terms of the sensitivity of net interest income and economic value for the Group's main financial institutions as of December 31, 2012:

(Million euros)

	Impact on Net Interest Income <sup>(1)</sup>							
	Increase of 100 basis points				Decrease of 100 basis points			
	Euro	Dollar	Other	Total	Euro	Dollar	Other	Total
Europe	-2.66%	-0.10%	-0.00%	-2.76%	+2.73%	+0.14%	+0.00%	+2.88%
BBVA Bancomer	-	+0.73%	+1.93%	+2.65%	-	-0.73%	-1.93%	-2.65%
BBVA Compass	-	+6.26%	-	+6.26%	-	-7.50%	-	-7.50%
BBVA Chile	-	+0.16%	-3.32%	-3.16%	-	-0.17%	+3.32%	+3.15%
BBVA Colombia	-	+0.16%	+2.48%	+2.64%	-	-0.13%	-2.37%	-2.67%
BBVA Banco Continental	-	-0.31%	+1.85%	+1.54%	-	-1.86%	+0.33%	-1.53%
BBVA Banco Provincial	-	+0.21%	+1.71%	+1.92%	-	-1.57%	-0.21%	-1.78%
BBVA Banco Francés	-	-0.17%	+0.57%	+0.39%	-	+0.17%	-0.57%	-0.40%
<b>GRUPO BBVA</b>	<b>-0.71%</b>	<b>+0.94%</b>	<b>+0.98%</b>	<b>+1.21%</b>	<b>+0.73%</b>	<b>-1.39%</b>	<b>-0.63%</b>	<b>-1.31%</b>

(1) Percentage relating to "1 year" net interest income forecast in each entity.

(Million euros)

	Impact on Economic Value <sup>(1)</sup>							
	Increase of 100 basis points				Decrease of 100 basis points			
	Euro	Dollar	Other	Total	Euro	Dollar	Other	Total
Europe	+0.38%	+0.21%	+0.00%	+0.59%	-0.55%	-0.22%	-0.00%	-0.78%
BBVA Bancomer	-	+2.87%	-1.85%	+1.02%	-	-2.88%	+2.04%	-0.84%
BBVA Compass	-	+7.05%	-	+7.05%	-	-12.51%	-	-12.51%
BBVA Chile	-	+0.28%	-12.47%	-12.19%	-	-0.35%	+11.71%	+11.36%
BBVA Colombia	-	+0.08%	+0.51%	+0.59%	-	-0.08%	-1.03%	-1.11%
BBVA Banco Continental	-	-2.66%	-3.15%	-5.82%	-	+2.78%	+2.95%	+5.73%
BBVA Banco Provincial	-	-0.03%	+0.51%	+0.48%	-	+0.03%	-0.57%	-0.54%
BBVA Banco Francés	-	+0.04%	-0.82%	-0.78%	-	-0.05%	+0.80%	+0.75%
<b>BBVA GROUP</b>	<b>+0.33%</b>	<b>+1.57%</b>	<b>-0.80%</b>	<b>+1.09%</b>	<b>-0.48%</b>	<b>-2.27%</b>	<b>+0.80%</b>	<b>-1.95%</b>

(1) Percentage relating to each entity's capital base.

The negative/positive sensitivity to a rise/fall in interest rates in the euro zone is temporary and limited to the first quarters, as a result of liabilities gaining value quicker than assets (basically the mortgage portfolio).

However, the economic impact of this rise in interest rates on net interest income is positive, as once the mortgage portfolio is revalued, and given the weight of customer deposits, the customer spread increases.

# 9. Liquidity and funding risk

## 9.1. Liquidity and funding management

Management of liquidity and structural funding within the BBVA Group is based on the principle of financial autonomy of the entities that make it up. This approach helps prevent and limit liquidity risk by reducing the Group's vulnerability during periods of high risk.

A basic principle of liquidity management in the BBVA Group is the financial independence of its subsidiaries. The aim is to ensure that price formation reflects the cost of liquidity correctly. For this reason, the Bank maintains a liquidity fund at the individual level: Banco Bilbao Vizcaya Argentaria S.A. and its subsidiaries, including BBVA Compass, BBVA Bancomer and the Latin American subsidiaries. The only exception to this principle is Banco Bilbao Vizcaya Argentaria (Portugal), S.A., which is financed by Banco Bilbao Vizcaya Argentaria, S.A.

Banco Bilbao Vizcaya Argentaria (Portugal), S.A. represented 0.91% of our total consolidated assets and 0.43% of total consolidated liabilities as of December 31, 2012.

The management and monitoring of liquidity risk is carried out comprehensively in each of the BBVA Group's business units using a double (short and long-term) approach. The short-term liquidity approach has a time

horizon of up to 365 days. It is focused on the management of payments and collections from the treasury and market activity, and includes operations specific to the area and each bank's possible liquidity requirements. The medium-term approach is focused on financial management of the whole consolidated balance sheet, with a time horizon of one year or more.

The Assets and Liabilities Committee (ALCO) within each business unit is responsible for the comprehensive management of liquidity. The Balance-Sheet Management unit, as part of the Financial Division, analyzes the implications of the Bank's various projects in terms of funding and liquidity and its compatibility with the target funding structure and the situation of the financial markets. The Balance-Sheet Management unit executes the resolutions agreed by ALCO in accordance with the agreed budgets and manages liquidity risk using a broad scheme of limits and alerts approved by the Executive Committee. The Risk Area, specifically Global Risk Management (GRM), provides the managers with support tools and metrics needed for decision-making.

Each of the local risk areas, which are independent from the local managers, complies with the corporate principles of

liquidity risk control that are established by GRM, the global structural risk unit for the entire BBVA Group.

At the level of each BBVA Group entity, the managing areas request and propose a scheme of quantitative and qualitative limits and alerts related to short and medium-term liquidity risks. Once agreed with GRM, controls and limits are proposed to the Bank's Board of Directors (through its delegate bodies), for approval at least once a year. The proposals submitted by GRM are adapted to the situation of the markets according to the level of appetite for risk aimed for by the Group.

The development and updating of the Corporate Liquidity and Finance Policy has ensured the strict organization of liquidity risk management, not only in terms of limits and alerts, but also procedures. In accordance with the Corporate Policy, GRM carries out regular measurements of risk incurred and monitors the consumption of limits. It develops management tools and adapts valuation models, carries out regular stress tests and reports on the liquidity risk levels to ALCO and the Group's Management Committee on a monthly basis; its reports to the management areas and Management Committee are more frequent.

Under the current Contingency Plan, the frequency of communication and the nature of information provided is decided by the Liquidity Committee at the proposal of the Technical Liquidity Group (TLG). In the event of any alert or possible crisis, the TLG carries out an initial analysis of the liquidity situation (short or long term) of the entity affected.

The TLG is made up of technical staff from the Short-Term Cash Desk and the Balance-Sheet Management and Structural Risks areas. If the alert signals established make clear that a situation of tension has arisen, the TLG informs the Liquidity Committee (made up of managers of the corresponding areas). The Liquidity Committee is responsible for calling the Financing Committee, if appropriate, which is made up of BBVA's President and COO and the managers from the Financial Area, the Risks Area, Global Business and Business area of the country affected.

One of the most significant aspects that have affected the BBVA Group in 2012, as well as in previous years, was the continuation of the sovereign debt crisis. The role played by official bodies in the euro zone and the ECB have been key in calming the markets and ensuring liquidity in the European banking system.

The main source of funding for the Group is customer deposits, which consist mainly of demand deposits, savings deposits and time deposits. As well as this, to cover additional liquidity requirements the Group also has access to the interbank market and the domestic and international capital markets. A series of national and international programs has been implemented to access capital markets by issuance of commercial paper and medium and long-term debt. Each of the entities

also maintains a diversified liquidity fund including liquid assets and securitized assets. Another source of liquidity is cash flow from operations. Finally, funding needs are supplemented with loans from the Bank of Spain and the European Central Bank (ECB), or the respective central banks in the countries where the subsidiary is located.

The following table shows the types of securities included in the liquidity fund at the most significant units:

## 2012 (Million euros)

	BBVA Eurozone <sup>(1)</sup>	BBVA Bancomer	BBVA Compass	Other
Cash and balances at central banks	10,106	5,950	4,310	6,133
Assets from credit transactions with central banks	33,086	6,918	10,215	7,708
Central government issues	25,148	3,865	0	7,275
<i>Of which: Spanish government bonds</i>	<i>21,729</i>	<i>0</i>	<i>0</i>	<i>0</i>
Other issues	7,939	3,053	3,627	432
Loans	0	0	6,587	0
Other non-eligible liquid assets	3,975	460	198	765
<b>ACCUMULATED AVAILABLE BALANCE</b>	<b>47,167</b>	<b>13,328</b>	<b>14,723</b>	<b>14,606</b>

(1) Includes BBVA S.A. and BBVA Portugal S.A.

Given this situation, the regulators have established new requirements with the aim of strengthening the balance sheets of banks and making them more resistant to potential short-term liquidity shocks. The Liquidity Coverage Ratio (LCR) is the metric proposed by the Bank Supervisory Committee of the Bank for International Settlements in Basel to achieve this objective. It aims to ensure that financial institutions have a sufficient stock of liquid assets to allow them to survive a 30-day liquidity stress scenario. In January 2013 some aspects of the document published by the Bank Supervisory Committee in December 2010 were updated and made more flexible. Among them are that the ratio will be included as a regulatory requirement as of January 1, 2015, with a demand for 60% compliance, which should reach 100% by

January 2019. The frequency of the reporting to supervisory bodies must increase from quarterly to monthly starting in January 2013.

In addition, the calibration period of the long-term funding ratio (over 12 months) called the "net stable funding ratio" (NSFR) has been maintained. The NSFR aims to increase the weight of medium and long-term funding on the banks' balance sheets. It will be under review until mid-2016 and become a regulatory requirement starting on January 1, 2018.

The BBVA Group is continuing to develop a orderly plan to adapt to the regulatory ratios that will allow it to adopt best practices and the most effective and strictest criteria for their implementation sufficiently in advance.

## 9.2. Liquidity and funding prospects

Liquidity and funding management of the BBVA Group's balance sheet helps to fund the recurrent growth of the banking business at suitable maturities and costs, using a wide range of instruments that provide access to a large number of alternative sources of funding. A core principle of the BBVA Group's liquidity and funding management is the financial independence of its banking subsidiaries. This aims to ensure that the cost of liquidity is correctly reflected in price formation and that there is sustainable growth in the lending business.

Throughout 2012 the wholesale short and long-term funding markets were affected by a high level of uncertainty and their performance varied widely. They were positive in the first quarter of the year as a result of the extraordinary actions taken by the European Central Bank (ECB), with two long-term liquidity auctions, combined with the improved risk perception of European countries. However, from April until the summer the situation was less favorable, due to doubts about the viability of the Spanish economy and the downgrades of both the sovereign debt and financial institutions. Finally, since the end of August, as a result of renewed action by the ECB, with its Outright Monetary Transactions (OMT), the

long-term funding markets have been more positive and allowed major banks such as BBVA to access the markets repeatedly, with both senior debt and mortgage-covered bonds. The short-term markets have been conditioned by a lack of appetite on the part of investors, due to rating downgrades, and this situation only improved in the last quarter of 2012.

In this difficult context BBVA has been able to maintain the access to the markets, as can be seen by its successful issuances in 2012. In the first quarter, BBVA operated completely normally, with a senior debt issue of €2 billion. In the last quarter, the Bank also accessed the European and US markets, with senior issues of €2.5 billion and USD 2 billion, respectively. Taking advantage of the improvement at the end of the year a further €2 billion were issued in 5-year covered bonds. In this environment of contributing liquidity to the balance sheet and a normal situation in wholesale issuance, BBVA has maintained a steady excess of liquidity over recent months, which will allow it to reduce the funds received from the ECB.

In conclusion, the BBVA Group's proactive policy in liquidity management, its retail business model with an ample contribution

of liquidity in 2012 and the reduced size of its assets, all give it a comparative advantage with respect to its European peers. Moreover, the continued positive proportion of retail deposits on the balance sheet in all its geographical areas means the Group can continue to improve its liquidity position, while at the same time improving its funding structure.

The following is a breakdown of maturities of wholesale issues by the nature of the issues:

(Million euros)

Maturities of wholesale issues	2013	2014	2015	After 2015	Total
Senior debt	7,104	4,737	5,475	1,957	19,273
Covered bonds	7,550	6,843	4,244	19,904	38,541
Public-covered bonds	2,355	1,300	0	1,151	4,806
Regulatory capital instruments <sup>(1)</sup>	1,238	0	148	3,940	5,326
Other long-term financial instruments	67	2	1	877	947
<b>TOTAL</b>	<b>18,314</b>	<b>12,882</b>	<b>9,868</b>	<b>27,829</b>	<b>68,893</b>

(1) Regulatory capital instruments are classified in this table by terms according to their contractual maturity.



# 10. Information on remuneration

Bank of Spain Circular 4/2011 of November 30 amends Circular 3/2008 of May 22, on the calculation and control of minimum capital base requirements, adding a new Rule One Hundred and Seventeen bis relating to

information on remuneration. This rule lays down that entities must disclose to the public and update periodically (at least once a year) the information explained below on its remuneration policy and practice, including

salaries and discretionary pension benefits, for the following: directors and other senior officers; employees who are risk takers or are responsible for control functions; and any other employees whose total remuneration

takes them into the same remuneration bracket as directors, senior officers and risk takers, and whose professional activities have a material impact on the institution's risk profile (hereinafter, "the Identified Staff").

## 10.1. Information on the decision-making process for establishing the remuneration of the Identified Staff

BBVA has a Remuneration Committee whose functions are set out in Article 36 of the Board of Directors' Regulations. They are as follows:

- Propose, within the framework established in the Company Bylaws, the remuneration system for the Board of Directors as a whole, in terms of both items and amounts and the form in which they are paid.
- Determine the extent and amount of the remuneration, entitlements and other economic rewards for the Chairman & CEO, the President & COO and, where applicable, other executive directors of the Bank, so that these can be reflected in their contracts. The Committee's

proposals on such matters will be submitted to the Board of Directors.

- Issue a Report on the directors' remuneration policy each year. This will be submitted to the Board of Directors, which will in turn inform the Company's Annual General Meeting each year.
- Propose to the Board the remuneration policy for senior officers, as well as the basic conditions of their contracts, and directly supervise the remuneration of senior officers responsible for risk management and compliance functions.
- Propose a remuneration policy to the Board for employees whose professional activities may have a

material impact on the institution's risk profile.

- Oversee observance of the remuneration policy established by the Company and periodically review the remuneration policy applied to executive directors, senior officers and employees whose professional activities may have a material impact on the institution's risk profile.

- Any others that may have been assigned under these Regulations or conferred by a decision of the Board of Directors.

As of the date of this report, the Committee was composed of five members, all of them external directors; four of them are independent, including its chairman, and therefore none of its members have executive positions in the entity.

Name and surname(s)	Position	Status
Carlos Loring Martínez de Irujo	Chairman	Independent
Ignacio Ferrero Jordi	Member	Independent
José Maldonado Ramos	Member	External
Juan Pi Llorens	Member	Independent
Susana Rodríguez Vidarte	Member	Independent

In compliance with its functions, the BBVA Remuneration Committee met eight times in 2012 to deal with such questions as were considered relevant to it.

Among the questions analyzed in determining the remuneration policy of the employees who carry out professional activities in the Group that may have a material impact on the Bank's risk profile, or who are responsible for the control function (the "Identified Staff"), are the following:

- Revision of the remuneration policy for Identified Staff, adapted to Royal Decree 771/2011 of June 3.
- Direct supervision of the remuneration of managers in the Risk and Compliance areas.
- Review of the application of the remuneration policy approved in 2011 for Executive Directors, the Management Committee, and the Identified Staff.

Finally, on January 31, 2013, BBVA's Board of Directors approved the report on the Board of Directors' remuneration policy that had been submitted by the Remuneration Committee. It also agreed to subject it to a consultative vote at the Annual General Meeting of Shareholders in March 2013. The report was approved by 96.46% of the votes cast and is available on the Bank's website ([www.bbva.com](http://www.bbva.com)).

The report on the Board's remuneration policy includes a description of the basic principles of the Bank's remuneration policy with respect to the members of the Board of Directors, whether executive or non-executive, as well as a detailed presentation of the different elements making up their remuneration. It has been prepared in accordance with BBVA's Bylaws and the Board of Directors' Regulations.

The report also includes the principles and basic elements of the Bank's general remuneration policy.

As already indicated, BBVA has a decision-making policy system for this matter in which the Remuneration Committee plays a key role. It is responsible for determining the amount of fixed and variable remuneration for the executive directors and the remuneration policy applicable to the Identified Staff, including the members of the Group's senior management; it then submits the corresponding proposals to the Board. To perform its functions, the Remuneration Committee has the support of the Bank's internal services and free access to any external advice it may consider useful.

Every year, the Remuneration Committee reviews the application of the remuneration policy approved by the Bank's Board of Directors.

In addition, all the decisions relating to share-based remuneration affecting the executive directors and members of the Group's senior management must be approved by the Annual General Meeting

of Shareholders of the Bank. The AGM decides on the essential aspects of the corresponding share-based remuneration plans and receives the Board of Directors' report on remuneration policy.

This system ensures an adequate decision-making process on questions of remuneration.

It is worth noting here that the decisions on remuneration made by the Remuneration Committee and the Board of Directors in the exercise of their functions have been made on the advice of BBVA's internal services, as well as information provided by one of the leading global consultants on remuneration for board members and senior officers.

In 2012 the members of the Remuneration Committee received an aggregate total of €278,000 for their work on it. The Board of Directors' report on remuneration policy includes a breakdown of the remuneration by item and committee member.

## 10.2. Description of the different types of employees and executive officers included as Identified Staff

Royal Decree 771/2011 establishes that credit institutions must present the Bank of Spain with a list indicating the categories of employees whose professional activities have a material impact on its risk profile.

In accordance with Article 76 quinquies.1.a), BBVA has identified the following groups of professionals as affected by the requirements of this new law (the Identified Staff), following the December 10, 2010 *Guidelines on Remuneration Policies and Practices prepared by the Committee of European*

*Banking Supervisors* (hereinafter “the CEBS Guidelines”), now the European Banking Association (hereinafter “EBA”). The staff included are as follows:

- **Senior Management:** BBVA has included executive directors and other members of BBVA's Management Committee within the Identified Staff.
- **“Risk takers”**, this group includes the following: Those who form part of the various Risk Committees, and

the members of the management committees of the Group's business areas. The Bank also considers as risk takers those employees whose variable annual remuneration, as defined in section 10.3 below, is above a benchmark threshold level and higher than their fixed remuneration; benchmark threshold level is above a certain amount regardless of their fixed remuneration.

- **Professionals responsible for the control function:** Within this group,

BBVA has identified those responsible for the following functions as to be included as Identified Staff: members of the Risk Committee, the Internal Audit Management Committee and those responsible for the Legal Compliance, Human Resources, and Global Accounting & Informational Management functions.

BBVA keeps a continuously updated list of the professionals who make up each of the above groups.

## 10.3. Key features of the remuneration system

BBVA's remuneration system is applied to the Identified Staff with a number of particular features under a special settlement and payment system for their variable annual remuneration, as explained below. The remuneration system is made up of:

### 1. Fixed remuneration

Fixed remuneration in BBVA is established by taking into consideration the employee's level of responsibility and professional career history in the Group. A benchmark salary is fixed for each function that reflects its value for the Organization. This benchmark salary

is defined by analyzing what is fair internally and comparing it with the market through the advice of leading firms specializing in remuneration.

The fixed component in the employee's total remuneration represents a sufficiently high proportion to allow maximum flexibility with respect to the variable components.

### 2. Variable remuneration of the Identified Staff

BBVA's variable remuneration represents a key element in the Bank's remuneration

policy, as it rewards the creation of value in the Group through each of the areas and units that make up BBVA. In short, it rewards individuals and teams and their combined contributions to the Group's recurrent earnings.

The Annual Variable Remuneration of the Identified Staff in BBVA is made up of ordinary variable remuneration paid in cash and a share-based variable remuneration. It has been designed to reflect the interests of shareholders, prudent risk management and generation of long-term value for the Bank. Its essential aspects are as follows:

#### 2.a) Ordinary variable cash remuneration

BBVA's ordinary variable remuneration model is based on a series of value creation indicators established for each unit. The variable remuneration to be paid to the members of the unit in question depends on these indicators, and on the results for the unit's area and those of the Group as a whole. The distribution of the remuneration between the staff members is based on individual performance, which is calculated through an individual evaluation of the indicators.

The unit indicators used are of two types: each unit's own financial and non-financial indicators.

BBVA considers that prudent risk management is a key element within its variable remuneration policy. That is why it has established recurrent Economic Value Added (EVA) as one of the main financial indicators used to calculate the ordinary variable remuneration of all its workforce.

Technically, EVA is recurring economic profit minus the cost of capital used in each business or the rate of return expected by investors. Economic profit differs from accounting profit because of the use of economic criteria rather than regulatory accounting criteria in some operations.

It can therefore be said that conceptually, EVA is the recurring economic profit generated above market expectations in terms of capital remuneration.

This indicator is considered to be in line with the Guidelines issued by the European Committee of Banking Supervisors, which has been adopted by the Bank of Spain as an adequate measure of results, as it incorporates adjustments for current and future risks and the cost of capital.

It has also been established that indicators of the units themselves that are responsible for control functions (Internal Audit, Legal Compliance, Global Accounting & Informational

Management, General Secretary, Risks and Human Resources) should have a greater weight than the financial indicators. This is in order to make the staff who are responsible for the control functions more independent with respect to the areas supervised.

Thus BBVA's ordinary variable remuneration combines the employees' results (financial and non-financial) with those of their unit, the area to which they belong and the Group as a whole; and it uses the EVA indicator, which takes into account both present and future risks, and the capital cost incurred to obtain these profits.

## 2.b) Variable share-based remuneration

BBVA understands that in order to optimize its alignment with the interests of its shareholders and to promote the generation of long-term value, it must maintain a specific variable share-based remuneration system for the Bank's executive managers (around 2,200 people in 2013), given their special influence on the Group's strategy and results. This specific variable remuneration is also an essential element in this group as is motivated and loyal to BBVA as possible.

The system is based on an incentive for the management team (hereinafter "incentive") consisting of an annual allocation to each executive manager of a number of units that will serve as a basis for determining the number of shares to grant at the settlement date of

the incentive. The number will be linked to the level of compliance with a series of indicators at Group level, which will be determined every year.

In 2013 the indicators will be the same as those established in previous years, and are related to:

- The Total Shareholder Return (TSR), which measures the return on investment for the shareholder as the sum of the change in share price plus dividends and other similar concepts received by shareholders in the period under consideration.
- The Group's recurring Economic Value Added (EVA) without one-offs. As explained above, this includes adjustments for current and future risks.
- The Group's net attributable profit without one-offs.

The number of units initially assigned to each beneficiary in the system will be divided into three parts, each associated with a weighted indicator. It will be multiplied by coefficients of between 0 and 2 in accordance with a scale defined annually for each of them.

In the case of TSR the coefficient applied will be zero if the Bank occupies positions below the average of its peer group during the established period. This reinforces the alignment of the team's variable remuneration with shareholder interests.

In calculating the incentive for 2013 the TSR will be measured over a two-year period starting in January 1 2012. This is a step forward toward a system that will allow the measurement of TSR over a three-year period, starting with the incentive payable for the years 2014 and following, and thus strengthening the multi-year factor of the remuneration elements.

## 2.c) Settlement and payment system for Annual Variable Remuneration

The Bank has a specific settlement and payment system in place for the variable annual remuneration applicable to employees who carry out professional activities that may significantly affect the Bank's risk profile, or who are responsible for control functions, including executive directors and the members of the Board of Directors.

This system has been created to promote prudent risk management in the Group. It is adapted to the requirements of Royal Decree 771/2011 and has the following rules:

- At least 50% of each one of the Annual Variable Remuneration payments will be paid in BBVA shares.
- Payment of 40% of the Annual Variable Remuneration, both from the part paid in cash and the part paid in shares, will be deferred. The deferred amount will be paid out in thirds over the next three years.

- The percentage deferred increases in the case of executive directors and members of the Management Committee, up to 50% of their Annual Variable Remuneration.
- The shares that are delivered may not be used for a period of one year starting from the date of their provision. This retention is applied on the net amount of the shares, after discounting the part necessary to make the tax payment for the shares received.
- No hedging transactions may be carried out on the shares received as Annual Variable Remuneration.

In addition, the Bank's Board of Directors, acting on a proposal by the Remuneration Committee, has established that the parts

of the Annual Variable Remuneration that are deferred and pending payment in accordance with the above rules will not be paid to the members of the Group if one of the following circumstances occurs before the payment date ("malus clauses"):

- If the beneficiary has not generated the right to Ordinary Variable Remuneration for the year as a result of the effect on results for the year of transactions accounted for in previous years which generated the right to payment of the Ordinary Variable Remuneration.
- If the beneficiary has been sanctioned for a serious breach of the code of conduct or other applicable internal rules, in particular related to risks.
- If the contractual relationship has been terminated, except in the case of retirement, early retirement,

declaration of permanent incapacity for employment to any degree, or death: in these cases the right to payment shall be maintained under the same terms as if the employee had remained active.

If in one year the BBVA Group had negative financed losses), not including one-off results, the beneficiaries will not receive either the Annual Variable Remuneration corresponding to the year of the losses, or the deferred amounts that were payable for the year in which the annual accounts reflecting these negative results were approved.

In any event, the variable remuneration shall be paid only if it is sustainable with respect to the BBVA Group's situation as a whole and if it is justified by its results.

In accordance with the general policy of the BBVA Group for the Identified Staff, the parts

of the Annual Variable Remuneration that have been deferred under the above system shall be subject to updating under the terms laid down by the Board of Directors. The remuneration shall in all cases be subject to the same conditions as those established for payment of the corresponding deferred variable remuneration.

As indicated, the remuneration system described above is applicable to the Identified Staff, which includes the Bank's executive directors. However, BBVA's remuneration policy for members of its Board of Directors distinguishes between the remuneration system of executive directors and that applicable to its non-executive directors.

The remuneration policy applied to BBVA's non-executive directors is included in the report on the Bank's remuneration policy.

## 10.4. Information on the connection between the remuneration of the Identified Staff and the performance of the Group

As specified above, the amount of variable remuneration received by BBVA Identified Staff is determined by the following factors:

- The Group's financial results.
- The financial results and strategic projects in each business area.
- The financial results and the unit's own indicators (not financial).

- The individual's financial and non-financial targets.

The ordinary variable incentives of the executive directors depend on the Group's results, based on the recurrent EVA, net attributable profit and the recurrent efficiency ratio.

Similarly, the ordinary variable incentives of the Management Committee are linked to

both the Group's results and those of their management area.

For the rest of the members of the Identified Staff, the amount of variable remuneration depends on individual performance, results in the area in which they provide their service, and the Group's results overall.

In 2012, the Group's earnings (net attributable profit and recurrent EVA without one-offs)

determined 50% of the final incentives for the Management Team in 2012. The other 50% is determined by Total Shareholder Return (TSR), which as indicated for the incentive for 2013 will be measured over a period of two years.

As indicated earlier, it is also worth noting that payment of variable deferred annual remuneration that is deferred and pending payment could be limited or even stopped

in certain circumstances, including cases in which the bank obtained negative financial results.

However, any variable annual remuneration that is pending payment will always be paid,

provided that such payment is sustainable in terms of the situation of the BBVA Group as a whole.

By using the selection of indicators and calculation method explained above, BBVA

has brought the remuneration system for its management team into closer alignment with shareholder interests; it strengthens prudent risk management by incorporating recurrent EVA as an indicator; and it determines a direct relationship between the

variable remuneration of its executives and the Bank's long-term results, by taking into account the multi-year calculation of TSR and applying recurrent EVA.

## 10.5. Description of the criteria used for taking into consideration present and future risks in the remuneration process

As explained above the remuneration policy for Identified Staff is aligned with shareholders' interests and with prudent risk management, and includes the following elements:

- Use of Economic Value Added (EVA) as a metric for evaluating earnings used as a base to determine ordinary variable remuneration. EVA considers the level of risk incurred and the cost of capital, measuring the sustained generation of value for shareholders and complying with the principle of prudent risk management. Indicator that is also included in the calculation of variable share-based remuneration (Management Team Incentive).
  - The indicator is based on the level of risk assumed and the cost of capital.
- EVA takes into consideration the majority of risks assumed through the calculation of Economic Capital at Risk (ECaR).
  - ECaR reflects the minimum level of protection demanded against unexpected future losses by the different types of risk. Thus EVA not only includes the expected losses for the year, but also the risk of future losses.
  - BBVA measures and monitors liquidity risk, which is also taken into account for incentive payments, to the extent that a premium is transferred to the income statements of the business areas that includes the liquidity cost.
- Use of Total Shareholder Return (TSR), which measures the shareholder return on investment, as the main indicator determining variable share-based remuneration for the management team. The objective is to use a three-year period for its measurement starting in 2014, thus strengthening the multi-year measurement of results within the framework of the incentive scheme.
- Payment in shares of at least 50% of the variable remuneration.
- Deferment clauses, designed to ensure that a substantial part of the variable remuneration (between 40% and 50%) is deferred for a period of 3 years, thus taking into account the economic cycle and business risks.
- Obligatory withholding periods of any shares delivered as variable remuneration, so that beneficiaries may not freely dispose of them until one year after their delivery date.
- Clauses that impede or limit the payment of deferred variable remuneration or remuneration that may have to be paid in a specific year, as a result of either actions involving the individual recipient or the results of the Group as a whole, "malus clauses".
- Limitation of the amount of ordinary variable remuneration for executive directors to a percentage of their fixed remuneration.

## 10.6. The main parameters and reasons for any component of the possible variable remuneration plans and other non-monetary advantages

As already mentioned, in the case of employees who are responsible for control functions, variable remuneration will depend more firmly on the targets related to their functions, thus making them more

independent of the business areas they supervise.

Non-financial indicators therefore have a greater weight than financial indicators

in units that are responsible for control functions (Internal Audit, Legal Compliance, Global Accounting & Information Management, General Secretary, Risks and Human Resources). The aim of this is to

strengthen the independence of the staff who are responsible for control functions with respect to the areas supervised, in accordance Royal Decree 771/2011.

## 10.7. Quantitative information on the remuneration of the Identified Staff

Below is a breakdown by area of activity of the total remuneration of the Identified Staff generated in 2012, and that will be paid according to the settlement and payment

scheme established in section 10.3.2 c. Payment will be complete in 2016, provided that the "malus clauses" are not applied:

(Thousand euros)

Activity of Identified Staff	Total remuneration 2012
Investment Banking <sup>(1)</sup>	37,471
Commercial Banking <sup>(2)</sup>	27,101
Other <sup>(3)</sup>	50,410
<b>Total for Identified Staff</b>	<b>114,982</b>

(1) It includes wholesale and investment banking activities.

(2) It includes retail and commercial banking and insurance activities.

(3) Other activities, plus members of the Management Committee and Asset Management.

The following table gives aggregate information on the remuneration of the

Identified Staff, broken down by type of employees and executive managers:

There was only one new hire in the Identified Staff in 2012, and for reasons of

confidentiality the corresponding information on remuneration is not included.

(Thousand euros)

2012 remuneration for Identified Staff <sup>(1)</sup>	Executive directors	Other senior executives	Rest of Identified Staff	Total for Identified Staff
Total fixed remuneration paid in the year	3,750	10,302	47,118	61,170
Total variable remuneration for 2012 <sup>(2)</sup>	5,053	10,413	38,345	53,812
In cash	2,527	5,135	18,904	26,566
In shares or related instruments	2,527	5,278	19,441	27,246
In other instruments	0	0	0	0
Total deferred variable remuneration <sup>(3)</sup>	5,476	11,163	27,681	44,320
Consolidated	0	0	0	0
Not consolidated	5,476	11,163	27,681	44,320
In cash	2,354	4,846	12,976	20,176
In shares or related instruments	3,123	6,317	14,705	24,145
In other instruments	0	0	0	0
Total deferred remuneration granted in the year	2,527	5,197	15,308	23,032
Total deferred remuneration paid in the year	1,475	2,983	6,186	10,644
Amount of explicit ex post performance adjustment applied in the year on remuneration paid in previous years	0	0	0	0
<b>Number of beneficiaries <sup>(1)</sup></b>	<b>2</b>	<b>14</b>	<b>116</b>	<b>132</b>
Number of employees receiving severance pay	0	0	7	7
Total severance pay paid in the year	0	0	6,160	6,160

(1) Includes all employees who have occupied positions defined as among the Identified Staff for more than 6 months in 2012.

(2) Includes the annual variable remuneration generated in 2012, whether paid immediately or deferred.

(3) Includes the total variable remuneration generated in 2012 that has been deferred: two thirds of the annual variable remuneration generated in 2011 that was deferred and two thirds of the ILP 2010-2011 that was deferred.



# Annex

## Companies with a different method of consolidation and deducted from capital for the purposes of the Solvency Circular

Company	Accounting Circular	Solvency Circular	Activity
FINANZIA AUTORENTING, S.A.	G-Full consolidation	E-Equity method	Services
INGENIERÍA EMPRESARIAL MULTIBA, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services
CASA DE CAMBIO MULTIDIVISAS, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services
BBVA NOMINEES LIMITED	G-Full consolidation	E-Equity method	Services
PRO-SALUD, C.A.	G-Full consolidation	E-Equity method	Services
INVERSIONES P.H.R.4, C.A.	G-Full consolidation	E-Equity method	Real estate
INVERSIONES ALDAMA, C.A.	G-Full consolidation	E-Equity method	Real estate
BBVA CONSULTORÍA, S.A.	G-Full consolidation	E-Equity method	Services
BBVA SERVICIOS, S.A.	G-Full consolidation	E-Equity method	Services
PROMOTORA DE RECURSOS AGRARIOS, S.A.	G-Full consolidation	E-Equity method	Services
VIRTUAL DOC, S.L.	G-Full consolidation	E-Equity method	Services
EL ENCINAR METROPOLITANO, S.A.	G-Full consolidation	E-Equity method	Real estate
EL OASIS DE LAS RAMBLAS, S.L.	G-Full consolidation	E-Equity method	Real estate
ANIDA PROYECTOS INMOBILIARIOS, S.A. DE C.V.	G-Full consolidation	E-Equity method	Real estate
ANIDA SERVICIOS INMOBILIARIOS, S.A. DE C.V.	G-Full consolidation	E-Equity method	Real estate
MULTIASISTENCIA SERVICIOS, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services
MULTIASISTENCIA OPERADORA, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services
RESIDENCIAL CUMBRES DE SANTA FE, S.A. DE C.V.	G-Full consolidation	E-Equity method	Real estate
FIDEICOMISO HARES BBVA BANCOMER F/ 47997-2	G-Full consolidation	E-Equity method	Real estate
GRUPO PROFESIONAL PLANEACIÓN Y PROYECTOS, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services
BBVA AUTORENTING, SPA	G-Full consolidation	E-Equity method	Services
BAHIA SUR RESORT, S.C.	G-Full consolidation	E-Equity method	Real estate
BBVA RENTING, SPA	G-Full consolidation	E-Equity method	Services
ANIDA DESARROLLOS INMOBILIARIOS, S.L.	G-Full consolidation	E-Equity method	Real estate
SERVICIOS CORPORATIVOS DE SEGUROS, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services

	Accounting Circular	Solvency Circular	Activity
DESARROLLO URBANÍSTICO DE CHAMARTÍN, S.A.	G-Full consolidation	E-Equity method	Real estate
GOBERNALIA GLOBAL NET, S.A.	G-Full consolidation	E-Equity method	Services
FUTURO FAMILIAR, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services
ESTACIÓN DE AUTOBUSES CHAMARTÍN, S.A.	G-Full consolidation	E-Equity method	Services
URBANIZADORA SANT LLORENC, S.A.	G-Full consolidation	E-Equity method	Real estate
MULTIASISTENCIA, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services
ANIDA GERMANIA IMMOBILIEN ONE, GMBH	G-Full consolidation	E-Equity method	Real estate
BBVA SOLUCIONES AVANZADAS DE ASESORAMIENTO Y GESTIÓN, S.L.	G-Full consolidation	E-Equity method	Services
IMOBILIARIA DUQUE D'AVILA, S.A.	G-Full consolidation	E-Equity method	Real estate
COMPASS WEALTH MANAGERS COMPANY	G-Full consolidation	E-Equity method	Services
SERVICIOS TECNOLÓGICOS SINGULARES, S.A.	G-Full consolidation	E-Equity method	Services
FACILEASING, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services
COPROMED, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services
CATALONIA GEBIRA, S.L.	G-Full consolidation	E-Equity method	Real estate
ITINERARI 2002, S.L.	G-Full consolidation	E-Equity method	Services
SERVICIOS Y SOLUCIONES DE GESTIÓN PARA CORPORACIONES, EMPRESAS Y PARTICULARES, S.L.	G-Full consolidation	E-Equity method	Services
UNNIM SERVEIS DE DEPENDENCIA, S.A.	G-Full consolidation	E-Equity method	Services
UNITARIA GESTIÓN DE PATRIMONIOS INMOBILIARIOS	G-Full consolidation	E-Equity method	Real estate
UNICOM TELECOMUNICACIONES, S. DE R.L. DE C.V.	G-Full consolidation	E-Equity method	Services
VISACOM, S.A. DE C.V.	G-Full consolidation	E-Equity method	Services
SOCIETE IMMOBILIERE BBV D'ILBARRIZ	G-Full consolidation	E-Equity method	Real estate
<b>Insurance participation &gt;20% deducted from capital</b>			
BBVA SEGUROS COLOMBIA, S.A.	G-Full consolidation	E-Equity method	Insurance
BBVA SEGUROS DE VIDA COLOMBIA, S.A.	G-Full consolidation	E-Equity method	Insurance
SEGUROS PROVINCIAL, C.A.	G-Full consolidation	E-Equity method	Insurance
BBVA SEGUROS, S.A., DE SEGUROS Y REASEGUROS	G-Full consolidation	E-Equity method	Insurance
BBVA CONSOLIDAR SEGUROS, S.A.	G-Full consolidation	E-Equity method	Insurance
PREVENTIS, S.A.	G-Full consolidation	E-Equity method	Insurance
BBVA RE LIMITED	G-Full consolidation	E-Equity method	Insurance
BBVA SEGUROS DE VIDA, S.A.	G-Full consolidation	E-Equity method	Insurance
PENSIONES BANCOMER, S.A. DE C.V.	G-Full consolidation	E-Equity method	Insurance
SEGUROS BANCOMER, S.A. DE C.V.	G-Full consolidation	E-Equity method	Insurance
UNNIM PROTECCIO, S.A.	G-Full consolidation	E-Equity method	Insurance

	Accounting Circular	Solvency Circular	Activity
CAIXASABADELL VIDA, S.A. COMPANYIA D'ASSEGURANCES I REASSEGURANCES	P-Proportional consolidation	E-Equity method	Insurance
UNNIM VIDA, S.A. DE SEGUROS Y REASEGUROS	P-Proportional consolidation	E-Equity method	Insurance
CONSOLIDAR ASEGURADORA DE RIESGOS DEL TRABAJO, S.A.	G-Full consolidation	E-Equity method	Insurance
GARANTI EMEKLILIK VE HAYAT AS	P-Proportional consolidation	E-Equity method	Insurance
<b>Financial &gt;10% deducted from capital</b>			
COMPAÑÍA ESPAÑOLA DE FINANCIACIÓN DEL DESARROLLO, S.A.	E-Equity method	E-Equity method	Financial
TELFÓNICA FACTORING ESPAÑA, S.A.	E-Equity method	E-Equity method	Financial
BBVA ELCANO EMPRESARIAL, S.C.R., S.A.	E-Equity method	E-Equity method	Financial
BBVA ELCANO EMPRESARIAL II, S.C.R., S.A.	E-Equity method	E-Equity method	Financial
ROMBO COMPAÑÍA FINANCIERA, S.A.	E-Equity method	E-Equity method	Financial
TELFÓNICA FACTORING MÉXICO, S.A. DE C.V.	E-Equity method	E-Equity method	Financial
ADMINISTRADORA DE FONDOS DE CESANTÍA DE CHILE, S.A.	E-Equity method	E-Equity method	Financial
CAJA DE EMISIONES CON GARANTÍA DE ANUALIDADES DEBIDAS POR EL ESTADO, S.A.	E-Equity method	E-Equity method	Financial
CITIC INTERNATIONAL FINANCIAL HOLDINGS LIMITED CIFH	E-Equity method	E-Equity method	Financial
CHINA CITIC BANK CORPORATION LIMITED CNCB	E-Equity method	E-Equity method	Financial
CORPORACION SUICHE 7B, C.A.	E-Equity method	E-Equity method	Financial
CAJA VENEZOLANA DE VALORES, S.A.	E-Equity method	E-Equity method	Financial
INVERSIONES DCV, S.A.	E-Equity method	E-Equity method	Financial
SERVICIOS DE ADMINISTRACIÓN PREVISIONAL, S.A.	E-Equity method	E-Equity method	Financial
TF PERU SAC	E-Equity method	E-Equity method	Financial
CABAL URUGUAY, S.A.	E-Equity method	E-Equity method	Financial
REDBANC, S.A. (URUGUAY)	E-Equity method	E-Equity method	Financial
SOCIEDAD ADMINISTRADORA DE FONDOS DE CESANTÍA DE CHILE II, S.A.	E-Equity method	E-Equity method	Financial
ACA, S.A. SOCIEDAD DE VALORES	E-Equity method	E-Equity method	Financial
FINANCEIRA DO COMERCIO EXTERIOR, S.A.R.	G-Full consolidation	E-Equity method	Financial
COMPASS INVESTMENTS, INC.	G-Full consolidation	E-Equity method	Financial
COMPASS CUSTODIAL SERVICES, INC.	G-Full consolidation	E-Equity method	Financial
RIVER OAKS TRUST CORPORATION	G-Full consolidation	E-Equity method	Financial
SEGURO DE DEPÓSITOS, S.A.	E-Equity method	E-Equity method	Financial
BRUNARA, SICAV, S.A.	E-Equity method	E-Equity method	Financial
TELFÓNICA FACTORING DO BRASIL	E-Equity method	E-Equity method	Financial
BANKALARARASI KART MERKEZI A.S.	E-Equity method	E-Equity method	Financial
CELERIS SERVICIOS FINANCIEROS, S.A., E.F.C.	E-Equity method	E-Equity method	Financial

	Accounting Circular	Solvency Circular	Activity
FINAVES II, S.C.R., S.A.	E-Equity method	E-Equity method	Financial
FINAVES III NUEVAS INVERSIONES, S.A.	E-Equity method	E-Equity method	Financial
PROMOCIONES AL DESARROLLO BUMARI, S.L.	E-Equity method	E-Equity method	Financial
SOCIETAT CATALANA INVERSIO COOP. SCR	E-Equity method	E-Equity method	Financial
PRAX CAPITAL CHINA GROWTH FUND III, S.C.A. SICAR	E-Equity method	E-Equity method	Financial
INTERBANKING, S.A.	E-Equity method	E-Equity method	Financial
SERVICIO DE PAGOS INTERBANCARIOS, S.A.	E-Equity method	E-Equity method	Financial
FIDEICOMISO 27925-7 MEXDER	E-Equity method	E-Equity method	Financial
BOLSA ELECTRÓNICA DE VALORES DEL URUGUAY, S.A. (BEVSA)	E-Equity method	E-Equity method	Financial
VOLJA PLUS, S.L.	E-Equity method	E-Equity method	Financial