

# 06.2

## RISK PROFILE .

CREDIT RISK IS THE PREDOMINANT RISK IN THE BANK'S PROFILE. NEW GUIDELINES WERE APPROVED IN 2016 TO IMPROVE CREDIT RISK MANAGEMENT. OTHER RISKS THAT RECEIVED SPECIAL ATTENTION WERE ENVIRONMENTAL AND REPUTATIONAL RISK.

### CREDIT RISK

determines capital requirements, Bankia's risk profile is clearly oriented towards credit risk, as the following chart shows:

Based on the distribution of risk-weighted assets (RWAs), which is the indicator that



- CREDIT RISK 88%
- OPERATIONAL RISK 9%
- MARKET RISK 3%



- BUSINESSES 21%
- PUBLIC SECTOR 5%
- SPECIAL FIN. 4%
- DEVELOPERS 1%
- FINANCIAL INTERMEDIARIES 0%
- MORTGAGE 60%
- CONSUMER AND CREDIT CARDS 4%
- MICRO-ENTERPRISES AND SELF-EMPLOYED 5%

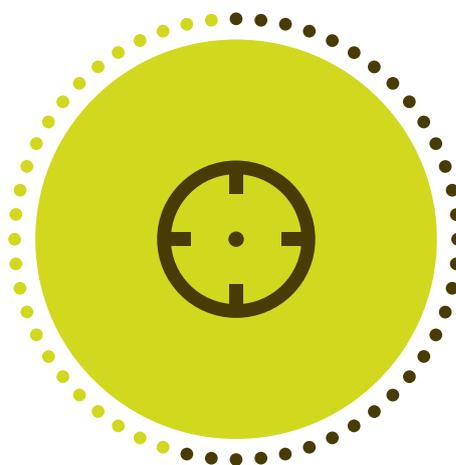


The main features of the bank's credit risk profile in 2016 were as follows:

- Some 60% of the total loan book consists of mortgage loans. The next largest component is business loans, which account for 21% of the total, as can be seen in the chart.
- The distribution of loans to customers between the wholesale and retail segments is much the same as in 2015, with 32% wholesale and 68% retail. The portfolio of real estate development-related assets fell 24% and at year-end 2016 represents only 0.8% of the total.
- The bond portfolio decreased by 19%, mainly as a result of debt maturities.
- The group ended 2016 with non-performing loans down 1,527 million euros, a much bigger decrease than budgeted. A substantial part of this result is attributable to the selection and sale of non-performing portfolios and the management and monitoring of recoveries. Thanks to this effort, the NPL ratio ended the year at 9.78%, down 0.8 points on 2015.
- Of the total non-performing assets, 58% are doubtful for "objective" reasons, including default, insolvency and litigation; and 42% is doubtful for "subjective" reasons (reasons other than default), based on the borrowers' credit assessment. At the same time, the coverage ratio reached 55.1%.

## REDUCTION OF DOUBTFUL EXPOSURES IN 2016

# €1,527 MILL.



- OBJECTIVELY DOUBTFUL **58%**
- SUBJECTIVELY DOUBTFUL AND RETURNED-TO-PERFORMING **42%**

# 06.2

## RISK PROFILE.

In terms of exposure at default (EAD), expected loss, economic capital and regulatory capital, the distribution of the credit risk is as follows:

PORTFOLIO	EAD	REGULATORY CAPITAL		ECONOMIC CAPITAL		EXPECTED LOSS	
Public sector	<b>39,680</b>	68	0.2%	233	0.6%	174	0.4%
Banks	<b>22,339</b>	239	1.1%	98	0.4%	36	0.2%
Businesses	<b>41,111</b>	1,699	4.1%	1,558	3.8%	2,740	6.7%
Developers	<b>1,364</b>	79	5.8%	195	14.3%	614	45.0%
Mortgage	<b>63,513</b>	1,878	3.0%	1,055	1.7%	1,963	3.1%
Consumer	<b>3,128</b>	153	4.9%	113	3.6%	115	3.7%
Cards	<b>3,925</b>	74	1.9%	56	1.4%	45	1.1%
Micro-ent. & sel-empl.	<b>5,805</b>	212	3.7%	144	2.5%	514	8.8%
Equity	<b>65</b>	9	14.3%	5	8.3%	0	0.7%
<b>Total</b>	<b>180,931</b>	<b>4,412</b>	<b>2.4%</b>	<b>3,455</b>	<b>1.9%</b>	<b>6,201</b>	<b>3.4%</b>

Amounts in millions of euros and percent of EAD.

These figures lead to the conclusion that the bank has more than sufficient provisions and capital to face both expected and unexpected losses with a very high level of confidence.



The new Credit Risk Policy Framework is divided into two general guides, which are approved by the Board of Directors, and two sets of specific criteria, which are approved by the management committees.

## NEW POLICY FRAMEWORK

On 24 November 2016, Bankia's Board of Directors approved a new Credit Risk Policy Framework, which represents a material change compared with the previous years' policies. The new policy framework is divided into two general guides, which are approved by the Board of Directors, and two sets of specific criteria, which are approved by the management committees:

- Policy Manual. This manual covers principles, scope, roles and responsibilities, organisation, delegation of specific criteria, approval process, compliance monitoring and control, and diffusion.
- General Policy Statement. This statement covers the general criteria and the mechanisms for delegating responsibility for the specific criteria.
- Specific criteria on policies, methods and procedures relating to risk approval, risk monitoring and risk recovery.
- Specific criteria on policies, methods and procedures relating to credit risk classification and coverage.

The goal is to ensure responsible, stable lending and keep it in line with the bank's strategy; set prices appropriately; limit

concentration; ensure information quality; and align the risk policy with capital needs.

The general criteria for credit risk approval revolve around five main guidelines:

- Responsible lending. Customers must be offered the financing facilities that best meet their needs, on terms and in an amount that is consistent with their ability to pay, and must be provided with the information they need in order to understand the risks.
- Focus on retail and SME banking in Spain. The financing of real estate activities, projects, acquisitions and assets is restricted.
- Knowledge of the customer's creditworthiness. This must be founded on a thorough analysis of the customer's credit history and ability to pay.
- Appropriate lending. The financing must be based on realistic payment plans and matched to the purpose for which it is granted and the collateral valuation.
- Environmental and social risk. The environmental impact of the customer's business activity must be taken into account. The granting of new loans to customers who do not respect human and labour rights is also restricted.

# 06.2

## RISK PROFILE.

### MARKET RISK

Market risk is the risk of losses arising from adverse movements in the prices of the financial instruments in which the bank trades.

As a result of the undertakings given in the Recapitalisation Plan, the bank's activity in financial markets remained limited. Specifically, its proprietary trading activity remained on hold, reducing market risk and the need for capital to cover it.

In 2016 the group carried out the following actions in relation to market risk:

- Defined and parameterised a new improved system for measuring value at risk (VaR) and developed the prudent valuation methodology to meet the new regulatory challenges.

- Responded to requests and oversaw the bank's participation in the various exercises carried out by the European Banking Authority (EBA) and the European Central Bank: EBA 2016 EU-wide Transparency Exercise, EBA 2016 Benchmarking Exercise, EBA 2016 Stress Test, SSM 2016 Short-Term Exercise for SREP (quarterly), SSM 2016 Reporting of time series concerning back-testing (quarterly) and BCBS 2016 QIS Basel III.

Looking to 2017, the main challenges in relation to market risk are to complete the integration of all credit transactions in a single application, continue the migration of the VaR calculation tool to the integrated environment and make the methodology for prudent valuation adjustments more consistent.



## VaR

New improved system for measuring value at risk.



## EBA

2016 EU-Wide Transparency Exercise.



## SSM

2016 Reporting of time series concerning back-testing (quarterly).



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## COUNTERPARTY RISK

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Counterparty credit risk is the risk that a counterparty will fail to meet its contractual obligations, giving rise to a loss for the bank in its financial market activity.

The Board of Directors is responsible for the approval of the Policy Manual for Credit Risk in Market Activities, which includes the following:

- Definition of counterparty risk and types of authorised products, both lending and fixed-income.
- Definition of authorised holders and criteria for assigning limits.
- Metrics for calculating risk.
- Tools for mitigating risk, such as break clauses in derivatives, the posting of collateral equal to the net market value of positions or the use of central clearing houses.

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# 06.2

## RISK PROFILE.

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The development of the new methodology for derivative exposures progressed in 2016. This methodology is expected to be implemented in 2017 for the capital calculation and the value adjustment for counterparty risk. It will allow the bank to adapt to the various exercises carried out by the European Banking Authority and the European Central Bank.

On the other hand, a large number of derivative contracts were moved to CCPs to comply with the European Market Infrastructure Regulation (EMIR), which regulates the reporting of derivative contracts and imposes clearing obligations.

The goals for the current year are to migrate the existing system of limits to the integrated system, validate the new regulatory counterparty risk calculation and continue to adapt to the EMIR rules.

The measures corresponding to regulatory scenarios are incorporated in the bank's Risk Appetite Framework and the limits are adapted to the tolerance and appetite levels set by the Board of Directors. To allow these measures to be monitored, the Assets and Liabilities Committee (ALCO) is provided with monthly information on the situation of asset and liability management (ALM) risk, both in terms of economic value and in terms of net interest income. At least quarterly, the Risk Advisory Committee reports to the Board of Directors on the situation and monitoring of the limits. However, any breach of high-level limits is reported immediately.

To supplement the regulatory scenarios (impact of parallel shifts in interest rates, currently  $\pm 200$  basis points), the bank prepares various sensitivity scenarios involving non-parallel shifts in the curves that alter the slope of the reference rates for assets and liabilities.

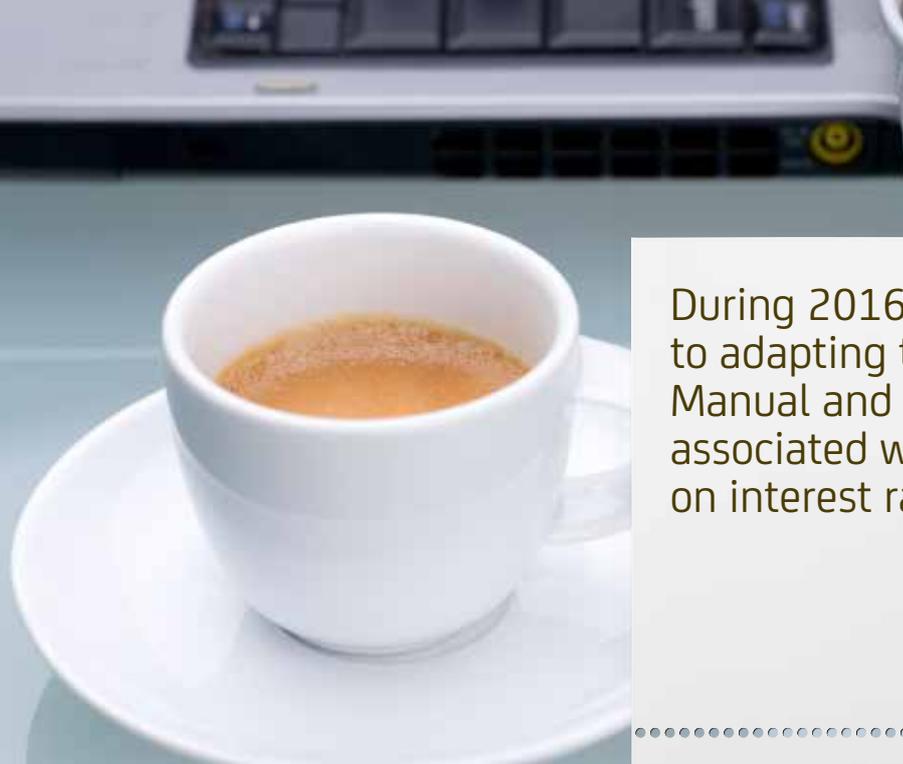
## INTEREST RATE RISK IN THE BANKING BOOK

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Interest rate risk in the banking book (IRRBB) is the risk of loss resulting from adverse movements in market interest rates, which affect both net interest income and the value of assets and liabilities. The management of IRRBB, as with other risks, is based on a clear separation of roles and responsibilities.

During 2016, the group gave priority to adapting the Structural Risk Policy Manual and defining the metrics associated with the new EBA guidelines on interest rate risk. These guidelines include and improve the high-level principles contained in previous guides. The bank is currently working on various technical issues to improve the corporate governance of ALM risk, add new scenarios for use in management and develop the measurement methodologies.

The challenges for 2017 are to continue to improve information and data quality, implement methodological improvements in



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the IRRBB model and develop a stress testing programme for assessing IRRBB under conditions of stress.

## LIQUIDITY AND FUNDING RISK

Bankia wishes to maintain a long-term funding structure in accordance with the liquidity of its assets, seeking maturity profiles that are compatible with the generation of stable, recurring cash flows, so that the balance sheet can be managed without liquidity strains in the short term.

To that end, it controls its liquidity position daily. In line with the retail business model on which its banking activity is based, the bank's main source of funding is customer deposits. To cover any additional liquidity requirements, the bank raises funds in the national and international capital markets, especially the repo markets. As a complementary measure to guard against possible strains or crisis situations, the bank holds various assets as collateral at the ECB, which allow it to obtain immediate liquidity.

As regards the structure of roles and responsibilities, the ALCO is charged with monitoring and managing liquidity risk in accordance with the proposals prepared mainly

by the Corporate Finance Directorate and in line with the Liquidity and Funding Risk Appetite Framework approved by the Board of Directors. The ALCO proposes funding actions, broken down by instrument and maturity, with a view to ensuring the availability of funds at all times, at reasonable prices, to meet the bank's obligations and finance its lending activity.

The Market and Operational Risks Directorate acts as an independent unit. One of its functions is to monitor and analyse liquidity risk and integrate it in management by developing metrics and methodologies for controlling the risk, so that it remains within the tolerance limits set in the bank's risk appetite.

As a complement to the monitoring of liquidity risk in normal business conditions, an action framework has been designed for preventing and managing liquidity stress events. The cornerstone of this framework is the Contingency Funding Plan (CFP).

In 2016, Bankia continued to strengthen the liquidity and funding risk management framework. To that end, through an internal liquidity adequacy assessment process (ILAAP), the bank analysed the extent to which the existing management framework complies with the principles and guidelines established by regulators and supervisors, which must be commensurate with the size and complexity of the institution. The weaknesses and points for improvement discovered in this exercise gave scope to further enhance the quality of liquidity management during the year. The main actions taken were as follows:

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# 06.2

## RISK PROFILE.

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- Regulatory reporting was improved, both as regards the implementation and automation of metrics and as regards the definition of methodologies and processes.
- Monitoring of intra-day liquidity risk was implemented and intra-day liquidity risk was included in the Contingency Funding Plan.
- Operational tests of the liquidity buffer were carried out, incorporating the prudent valuation methodology as a measuring tool.
- The stress test programmes were improved.
- The risk governance framework was reinforced through the approval of the Market Access Policy Manual.

The goals for 2017 are to further automate regulatory reporting, adapt the model to the implementation standards published by the EBA and develop intra-day liquidity measures under conditions of stress.

Furthermore, methodological improvements will be made to transfer prices and their effective implementation in the bank's internal processes.

## OPERATIONAL RISK

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Operational risk is the risk of loss resulting from inadequate or failed processes or systems, human factors or external events. This definition includes legal risk but excludes reputational risk.

Bankia's objectives in relation to operational risk are to:

- Promote a management culture oriented to awareness building, acceptance of responsibility and service quality.
- Ensure that operational risk is identified and measured in order to prevent possible losses that might affect results.
- Reduce losses by applying systems of continuous improvement in processes, control structure and mitigation plans.
- Continue to apply risk transfer mechanisms that will limit exposure.
- Validate the existence of contingency and business continuity plans.

During 2016, operational risk management was centred on assessing the risks of delegated functions and outsourced processes. This was done by deploying the methodology developed since 2015. An offer was developed to purchase insurance to cover possible losses arising from the cyber risk associated with Bankia's activity.

The Operational Risk Directorate took an active part in the preparation and approval of the Internal Market Fraud Prevention Manual and the Reputational Risk Policies and Procedures Manual. It also participated in the Technology Fraud Committee, which was created in 2016 to oversee this type of incident and receive reports on improvement and mitigation plans.



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## ENVIRONMENTAL RISK

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A financial institution has a very limited environmental impact. However, it exercises a very significant indirect influence through its customers' production activities and investment decisions.

The goal of environmental risk management is therefore to protect the quality of the bank's assets by supervising the portfolios of loans to customers and controlling the decisions to invest in financial or physical assets.

The environmental risk inherent in customers' production activity can be transferred to the bank in two ways:

# 06.2

## RISK PROFILE.

- **Reputational risk.**

Society's awareness of environmental issues has prompted closer scrutiny of the repercussions of the activities of banks' customers, thus increasing reputational risk for banks. The threat of climate change further intensifies this risk.

- **Credit risk.**

Credit risk may arise from the impact that environmental issues have on the viability of a customer's business (regulation or environmental authorisations), increased investments in technology, regulatory risk, loss of cash flows, impairment of assets posted as collateral, or civil or criminal liabilities with internal or external bail.

To manage environmentally-related credit risk, Bankia has a tool that gives corporate customers an environmental rating, which provides qualitative information complementary to that provided by the financial rating. The environmental rating serves to assess the environmental impact of a company's activities, how the environmental impact may affect the viability of the company's businesses and, consequently, its influence on the bank's credit risk.

The bank has established a scale of levels that reflect a company's environmental situation:



To manage credit risk, BANKIA has an environmental rating tool for corporate customers that provides qualitative information to supplement that provided by the financial rating.

The tool can be used to obtain an overall rating of the bank's portfolios of loans to large and medium-sized companies. The result of the assessment shows that 80.3% of the obligors or customers and 72.8% of the drawn exposure is in portfolios rated as having low or very low environmental risk.

#### ENVIRONMENTAL RISK

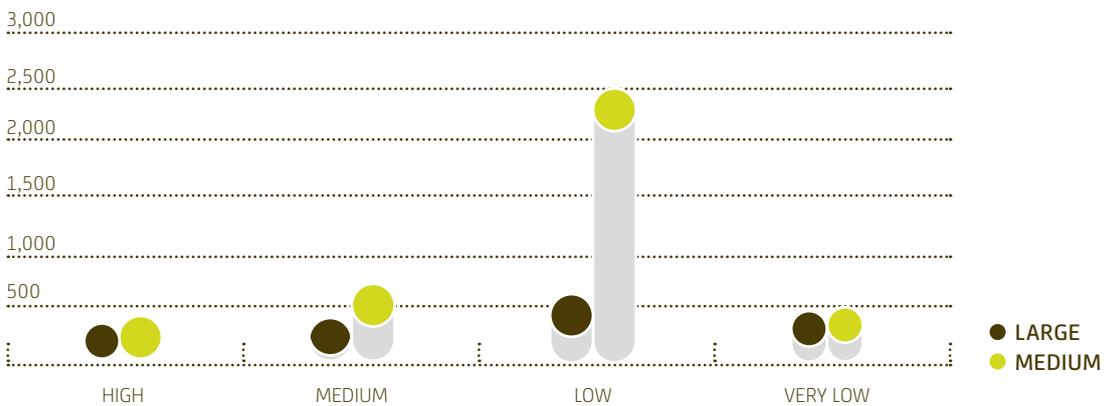
RATING BAND	OBLIGORS		DRAWN EXPOSURE		CREDIT LIMIT	
	NUMBER	%	€MN	%	€MN	%
Very low	773	17.4%	6,044,583,022	36.2%	13,480,143,243	37.8%
Low	2,797	62.9%	6,108,825,970	36.6%	12,387,910,400	34.7%
Medium	781	17.6%	4,309,524,221	25.8%	9,042,787,911	25.4%
High	95	2.1%	241,272,460	1.4%	758,050,928	2.1%
<b>Total</b>	<b>4,446</b>	<b>100.0%</b>	<b>16,704,205,673</b>	<b>100.0%</b>	<b>35,668,892,481</b>	<b>100.0%</b>

# 06.2

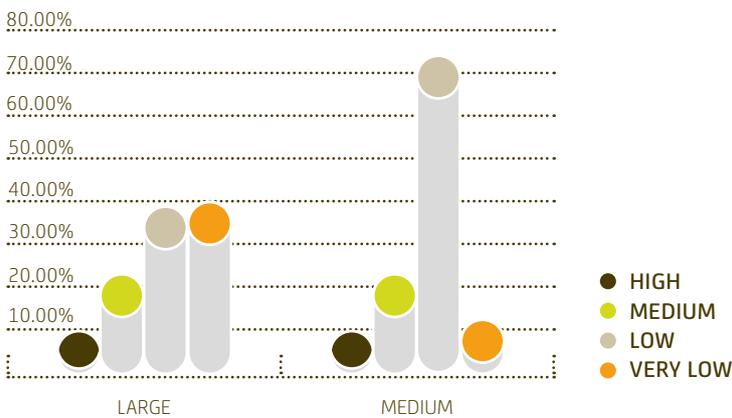
## RISK PROFILE.

If we separate the large and medium-sized businesses and look at the percent distribution of the two portfolios in terms of number of obligors and drawn amounts, we can also see that the ratings are concentrated in the low and very low bands, as the following chart shows:

BUSINESS BORROWERS BY CREDIT RATING (%)



BUSINESS BORROWERS BY DRAWN EXPOSURE (%)





In 2016, in a market context characterised by a moderate recovery in lending and an improvement in economic activity and in Spaniards' disposable income, the problems of non-payment in mortgage contracts and other loans eased.

## SOCIAL RISK

In 2016, in a market context characterised by a moderate recovery in lending and an improvement in economic activity and in Spaniards' disposable income, the problems of non-payment in mortgage contracts and other loans eased. Even so, Bankia maintained its policy of offering negotiated solutions for customers who faced difficulties in meeting their obligations, both in the early stages of delinquency (forbearance, surrender in satisfaction of debt) and where the asset has already been foreclosed, within the framework of its policy of preventing social risks.

A total of 5,628 mortgage modifications were carried out, establishing more flexible conditions to adapt the loans to households' ability to pay, 54% fewer than the previous year. At the same time, 550 transfers of homes in satisfaction of mortgage debt were accepted (934 in 2015). In all cases, these were negotiated solutions, aimed at avoiding evictions among social groups of proven special vulnerability, while at the same time seeking to minimise the loss to the bank. Foreclosed homes (i.e., homes repossessed by the bank under a court order) totalled 1,971 (3,968 the previous year).

Since 2012 Bankia has accepted a total of 7,927 transfers of property in satisfaction of debt and has executed 74,275 mortgage modifications. In doing so it has helped

## TOTAL NEGOTIATED SOLUTIONS SINCE 2012

# 184,946

mitigate one of the most dramatic consequences of the economic crisis for households, namely, the loss of their home as a result of the supervening impossibility of servicing the debt that was used to finance it.

The help that Bankia provides to customers in need is not confined to mortgage customers. Last year the bank also renegotiated the terms of 1,809 consumer loans (9,253 in 2015) and 1,005 loans to self-employed individuals and businesses (3,588 in 2015). The cumulative totals since 2012 are 60,275 and 17,139, respectively.

# 06.2

## RISK PROFILE.

### NEGOTIATED SOLUTIONS

	YEAR				
	2016	2015	2014	2013	2012
Total no. of homes surrendered in lieu of payment	550	934	1,497	1,590	3,356
Total no. of foreclosed homes	1,971	3,968	5,570	4,614	9,207
Total no. of mortgage modifications	5,628	12,341	14,079	23,178	19,049
Total no. of consumer loan modifications	1,809	9,253	12,821	23,752	12,640
No. of self-employed/business loan modifications	1,005	3,588	3,477	5,667	3,402
<b>Total negotiated solutions</b>	<b>10,963</b>	<b>30,084</b>	<b>37,444</b>	<b>58,801</b>	<b>47,654</b>

## EMERGING RISKS

Together with what are considered the classic risks for financial institutions, recent years have seen the emergence of new risks, which until recently went unnoticed. These new risks have to do with changes in the regulatory environment, consumer habits and the financial services industry and advances in technology. They include risks relating to cyber security and competition from fintech companies, as well as reputational risks.

Cyber security risks are a significant and growing threat in an environment marked concurrently by three factors: -Increasingly rapid evolution of technology. New technologies with new functions and facilities are appearing constantly. -Offering of free services by technology companies in exchange for information (including financial information) about users, which can then be marketed and sold. -Digital transformation of deposit-taking institutions, for which the integrity and confidentiality of customer information takes priority.

To deal with this scenario, which cyber criminals try to exploit, Bankia has reinforced its security measures. A Cyber Security



Emerging risks have to do with changes in the regulatory environment, consumer habits and the financial services industry and advances in technology.

Transformation Plan was started and a Cyber Security Committee, made up of senior managers representing the main areas of the bank, was created.

Moreover, a cyber security team was involved from the outset in every major project undertaken in the context of Bankia's digital transformation, so that the necessary security measures could be adopted.

The growth of fintech companies (companies that use new technologies to deliver financial services) is generating new business models in the financial sector that represent both a risk and an opportunity for the bank. Bankia's technology base is prepared to stimulate the formation of new alliances and collaboration projects between the bank and fintech companies that will support the creation of those new business models. This policy demands that certain applications be made more flexible, so as to be able to respond quickly to new needs.

Reputational risks are also on the rise, insofar as it is proven that they can directly affect the income statement, just like other extra-financial risks (environmental risk, social risk, etc.). Since the end of 2015, following the recommendations of the Good Governance Code adopted in the 2016-2018 Responsible Management Plan approved by the Board of Directors, Bankia is carrying out an enterprise-wide exercise to identify, assess and control extra-financial risks. The aim is to improve the management of reputational risk and comply with the new regulatory and supervisory requirements.

To meet these requirements, in July 2016 the Board of Directors approved the Reputational Risk Management Policy Manual. This manual describes the roles and responsibilities of the bodies involved in the various phases of the reputational risk management process and documents the procedures in place for integrated risk management.

During 2016 a map of the bank's reputational risks was drawn up. The map classifies risk events according to their severity, so that the ones most likely to cause a serious loss (of resources, customers, etc.) to the group can be actively managed.

The goal for 2017 is to carry out a project to automate reputational risk management, which will help to strengthen the bank's risk culture and underline the importance of extra-financial risks.