

# **FINANCIAL STABILITY REPORT**

**5/2013**



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FINANCIAL STABILITY REPORT MAY 2013

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## ABBREVIATIONS (\*)

|        |  |
|--------|--|
| €      | Euro   |
| AIAF   | Asociación de Intermediarios de Activos Financieros (Association of Securities Dealers)                |
| ABCP   | Asset-backed commercial paper  |
| ATA    | Average total assets   |
| BCBS   | Basel Committee on Banking Supervision   |
| BIS    | Bank for International Settlements   |
| BLS    | Bank Lending Survey  |
| bn     | Billions   |
| bp     | Basis points   |
| CBE    | Banco de España Circular   |
| CBSO   | Banco de España Central Balance Sheet Data Office  |
| CCR    | Banco de España Central Credit Register  |
| CDO    | Collateralised debt obligation   |
| CDS    | Credit Default Swap  |
| CEBS   | Committee of European Banking Supervisors  |
| CEIOPS | Committee of European Insurance and Occupational Pensions Supervisors                                  |
| CIs    | Credit institutions  |
| CNMV   | Comisión Nacional del Mercado de Valores (National Securities Market Commission)                       |
| CPSS   | Basel Committee on Payment and Settlement Systems  |
| DIs    | Deposit institutions   |
| EAD    | Exposure at default  |
| EBA    | European Banking Authority   |
| ECB    | European Central Bank  |
| EFSF   | European Financial Stability Facility  |
| EMU    | Economic and Monetary Union  |
| EONIA  | Euro overnight index average   |
| EPA    | Official Spanish Labour Force Survey   |
| ESFS   | European System of Financial Supervisors   |
| ESM    | European Stability Mechanism   |
| ESRB   | European Systemic Risk Board   |
| EU     | European Union   |
| FASB   | Financial Accounting Standards Board   |
| FROB   | Fund for the Orderly Restructuring of the Banking Sector   |
| FSA    | Financial Services Authority   |
| FSAP   | Financial Sector Assessment Program  |
| FSB    | Financial Stability Board  |
| FSF    | Financial Stability Forum  |
| FSR    | Financial Stability Report   |
| FVC    | Financial vehicle corporation  |
| GAAP   | Generally Accepted Accounting Principles   |
| GDI    | Gross disposable income  |
| GDP    | Gross domestic product   |
| GVA    | Gross value added  |
| GVAmP  | Gross value added at market prices   |
| IASB   | International Accounting Standards Board   |
| ICO    | Instituto Oficial de Crédito (Official Credit Institute)   |
| ID     | Data obtained from individual financial statements   |
| IFRSs  | International Financial Reporting Standards  |
| IMF    | International Monetary Fund  |
| INE    | National Statistics Institute  |
| IOSCO  | International Organization of Securities Commissions   |
| ISDA   | International Swaps and Derivatives Association  |
| LGD    | Loss given default   |
| LTROs  | Longer-term refinancing operations   |
| LTV    | Loan-to-value ratio (amount lent divided by the appraised value of the real estate used as collateral) |
| m      | Millions   |
| MiFID  | Markets in Financial Instruments Directive   |
| MMFs   | Money market funds   |
| NPISHs | Non-profit institutions serving households   |
| OMT    | Outright Monetary Transactions   |
| OTC    | Over the counter   |

(\*) The latest version of the explanatory notes and of the glossary can be found in the November 2006 edition of the *Financial Stability Report*.

|      |                                    |
|------|------------------------------------|
| PD   | Probability of default             |
| PER  | Price earnings ratio               |
| pp   | Percentage points                  |
| RDL  | Royal Decree-Law                   |
| ROA  | Return on assets                   |
| ROE  | Return on equity                   |
| RWA  | Risk-weighted assets               |
| SCIs | Specialised credit institutions    |
| SMEs | Small and medium-sized enterprises |
| SIV  | Structured investment vehicle      |
| SPV  | Special purpose vehicle            |
| TA   | Total assets                       |
| TARP | Troubled Asset Relief Program      |
| VaR  | Value at risk                      |
| WTO  | World Trade Organisation           |

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## OVERVIEW

From May to mid-July 2012, tension on financial markets heightened notably. This increase in financial tensions was largely caused by the euro credibility crisis and speculations over a possible exit by Greece from the Monetary Union. Such issues affected the financial stability of the area, and more acutely so in the economies of certain Member States, Spain among them. The second half of 2012 was marked by an across-the-board and progressive improvement on financial markets, which began with the ECB's statement that it would do whatever was necessary to preserve the euro, and with the ECB Council's announcement on 2 August to create a new programme for the unlimited purchase of government bonds on secondary markets, subject to certain conditions. Likewise positive factors in the euro area were the headway made on the Single Supervisory Mechanism, the agreements on the aid programme for Greece and the fulfilment of the programmes in Ireland and Portugal. Outside the euro area, favourable developments included the easing of uncertainty over the US fiscal cliff – although the agreement reached in January did not fully dispel uncertainty given its partial nature – and the expansionary stance of monetary policies in certain countries, particularly in Japan.

Despite these favourable developments on financial markets, uncertainty remains high and there have been bouts of tension, such as those following the general elections in Italy or during the negotiations for a financial programme for Cyprus. Uncertainty also persists as to economic developments.

In Spain, economic policy measures were applied in 2012 in the structural, budgetary and banking areas, which also contributed to improving funding conditions for our economy. In the banking arena, the measures were aimed at reordering, recapitalising and restructuring the Spanish banking sector.

In early 2012 Royal Decree-Laws 2/2012 and 18/2012 were approved with the aim of exceptionally increasing provisioning requirements for the coverage of the real estate-related impaired assets that Spanish banks held on their balance sheets. In June, two external consultants independently conducted a stress test assessing the banking sector's overall capital needs. The results were released on 21 June. This top-down exercise, which enabled the Spanish banking sector's capital needs to be identified, was followed by a detailed bank-by-bank review of asset quality conducted by the four main audit firms operating in Spain, and a bottom-up (i.e. bank-by-bank) stress test, performed by one of the external consultants that had participated in the top-down stress test. The results of the bank-by-bank tests, released on 28 September, enabled the capital needs for each bank to be known. The tests were conducted under very strict conditions in light of the granularity of the data used, the severity of the macroeconomic scenario and the highly active participation of international authorities in overseeing the process.

The participation of the international authorities in monitoring the stress tests was highly active since, in parallel to these tests, a Memorandum of Understanding (MoU) on financial sector policy conditionality was signed on 20 July. The MoU included an undertaking to provide external financial assistance of up to €100 billion. In addition to requiring bank-by-bank capital needs be determined by means of an asset quality review process and stress tests, the MoU addressed the recapitalisation, restructuring and/or resolution of the least viable banks, which turned on the plans to tackle the capital needs detected through the

aforementioned stress tests and which included burden-sharing exercises involving shareholders and hybrid instrument-holders, along with the transfer of real estate assets by the banks receiving public aid to an asset management company (Sareb) that would have to be created to that end.

In the closing months of 2012 and in early 2013, the milestones set out in the MoU in connection with these areas were progressively reached. The MoU also included an extensive range of reforms that have been set in train following the agreed implementation schedule. Among the most significant of the measures agreed are the legislative reforms that have introduced a strengthened framework for bank resolution and recovery, improvements in the area of transparency requiring banks to report on their exposure to the real estate sector and on loan refinancing, the reform of savings banks, and the legal requirement that all Spanish banks meet a minimum core capital ratio of 9%.

All the foregoing measures have had varying effects on Spanish banks' balance sheets, profit and loss accounts and solvency. Accordingly, their analysis calls for an additional effort compared with previous reports. However, the information in the present report may help in understanding the impact of these measures.

In terms of the performance of the main variables of the sector, credit to the resident private sector in business in Spain continued contracting, a situation relatively extensive to both households and non-financial corporations and, among the latter, to the different sectors of activity and types of company depending on their size. The current economic situation does not only lessen the credit quality of households and firms but also reduces these groups' demand for financing. Compounding this is the need to lessen private-sector leverage, and also the difficulties financial institutions continue to face in gaining access to funding markets.

Doubtful assets in credit to the private sector, beyond the reduction therein arising from the transfer from banks to Sareb, have continued increasing. Combined with the reduction in credit, that explains the increases in doubtful asset ratios for both households and non-financial corporations. In a macroeconomic setting such as that expected for the present year, problem bank loans may be foreseen to continue rising. Yet the situation is different from that in 2012 because the provisions made as a result of the Royal Decree-Laws, the stress tests and the transfers to Sareb all help contain the uncertainty and the impact on solvency of the increase in bad debts.

In this respect, the Banco de España has conducted retrospective and prospective exercises that compare, for different loan portfolios, the default frequencies observed in 2012 and the probabilities of default projected until 2014 in the macroeconomic scenario recently published by the Banco de España with those estimated by the external consultant for these same dates in the bottom-up stress test. The results obtained show that the probabilities of default lie above the baseline scenario in these tests, but are far removed from those in the adverse scenario.

The aforementioned improved financial markets have allowed various Spanish banks to make issues on wholesale markets in 2013 Q1, while in recent months a reduction has been seen in Spanish banks' recourse to the Eurosystem. As regards retail financing, made up of the deposits of households and of non-financial corporations, a progressively more favourable trend has been observed since mid-2012, taking the form of positive rates of change in the opening months of 2013.

Taken as a whole, the Spanish banking sector posted losses at the consolidated level in 2012, concentrated mainly in banks in Group 1 (those in which the FROB had a majority holding when the stress tests were conducted) and Group 2 (the remaining banks that received public aid further to the stress test conducted by an external consultant). Generally, Spanish banks' profit and loss accounts evidenced in 2012 the increase in provisions associated with assets linked to real estate activity. In 2013 they will conceivably remain in a difficult situation given the expected weak performance of the economy.

From January 2013, Spanish banks have to comply with a core capital ratio of 9% in accordance with Law 9/2012, in fulfilment of one of the requirements of the MoU. The banks that have not been subject to recapitalisation processes meet this required regulatory level, as do those that are currently concluding their recapitalisation plans under the commitments entered into with the authorities.

In sum, over the closing months of 2012 and in early 2013, the Spanish banking sector has moved from a situation of uncertainty over the valuation of a portion of its assets and of extensive restructuring and recapitalisation to one in which the focus is on its performance in a setting where uncertainty continues to prevail on financial markets and the real economy remains sluggish. These last two factors shape a scenario that remains difficult for deposit institutions. Foreseeably, however, the headway made in the restructuring and recapitalisation of the banking sector, including the greater provisions set aside during 2012 and the transfers of real estate assets to Sareb, will have placed the sector in a better position to address the aforementioned difficulties and to gradually gain the confidence of the financial markets. To resume a more normal standing on the euro area financial markets, and for the signs of improvement in recent months to take root, will also hinge on the Member States' ability to tackle budgetary and structural measures domestically, and to push through reforms for the area as a whole, as is the case with the Banking Union.



## 1 MACROECONOMIC RISKS AND FINANCIAL MARKETS

International financial markets improved across the board, especially in the euro area. This was thanks to various measures by the economic authorities that have eased some of the uncertainties. That said, developments were not free from bouts of tension, as was recently the case with the negotiations on a financial aid programme for Cyprus

Since the publication of the previous FSR, there has been a widespread improvement in conditions on international financial markets as a result of the easing in certain sources of uncertainties such as those associated with the US fiscal cliff and, especially, those relating to the unfolding of the sovereign debt crisis in the euro area. The euro area saw a continuation of the easing of tensions that began in August last year when the ECB announced its new secondary market bond purchase programme, known as Outright Monetary Transactions (OMT). Among the factors behind this are the agreements reached at the December 2012 European Council on the start-up of the Single Supervisory Mechanism and those reached by the Eurogroup that same month regarding the aid programme for Greece, along with the headway by Ireland and Portugal in fulfilling their programmes. Progress was also evident in the financial assistance programme for the recapitalisation of ailing banks in Spain. Further contributing to this positive behaviour of the international financial markets was the fresh expansionary re-gearing of monetary policies in some developed countries. This is particularly notable in the case of Japan, where radical changes in monetary policy implementation have been announced and which consist of setting specific quantitative targets for the expansion of the money supply (which is scheduled to double in two years) and a revision of the inflation target from 1% to 2%. In the United States, the Federal Reserve linked the holding of interest rates at their current levels to unemployment and inflation thresholds. Nonetheless, these developments have not been free from bouts of tension, as was the case following the general elections in Italy, in late February, and that arising in mid-March further to the negotiations on a financial aid programme for Cyprus.

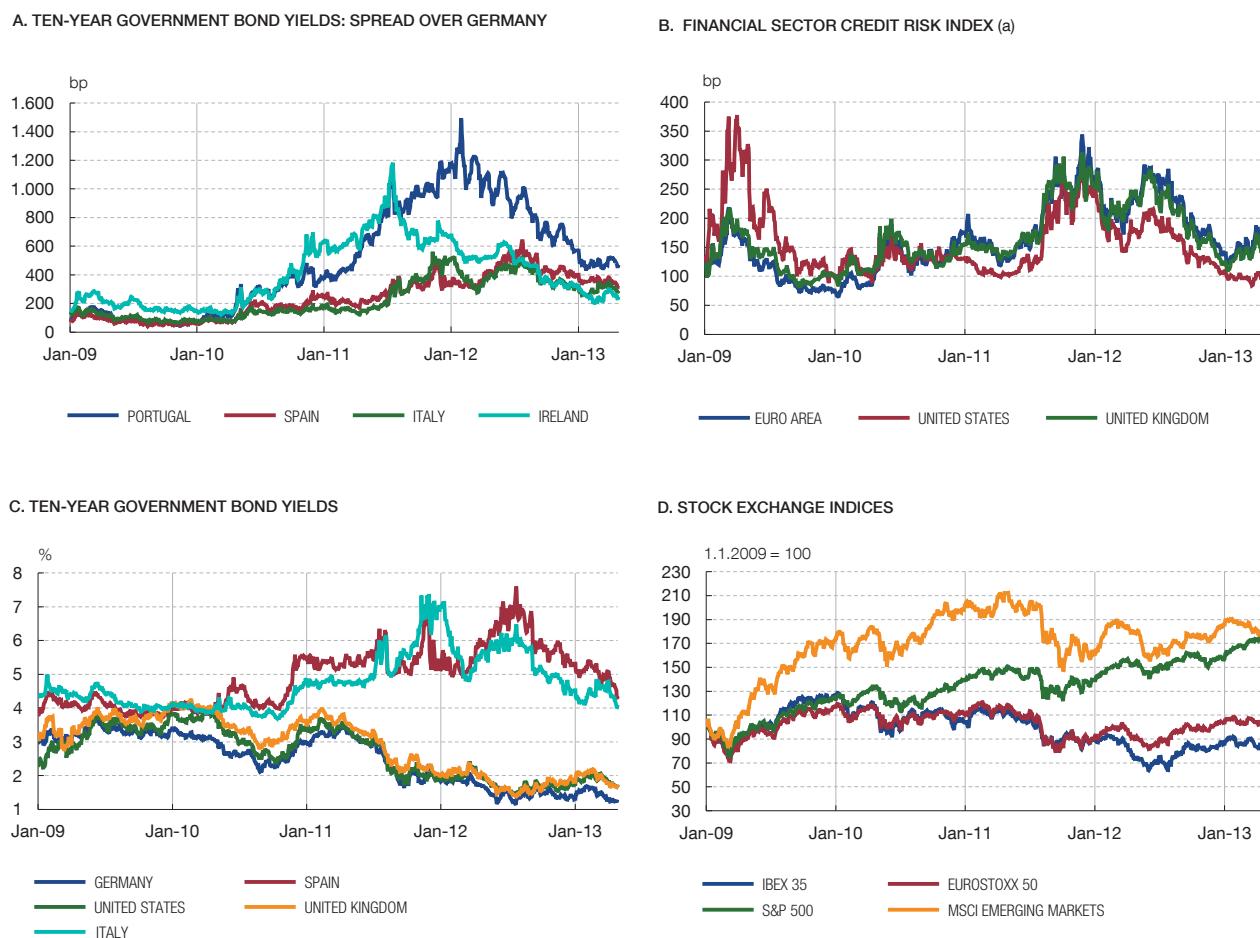
As analysed below, the patterns on financial markets are perceptible in the habitual indicators of financial stress, as they are in other types of systemic risk indicators such as that presented in Box 1.1.

Wholesale funding market conditions have improved

Against this background, stock market indices rose across the board (more markedly so in the United States), along with a reduction in volatility and declines in credit risk premia (see Chart 1.1). These developments were accompanied by an increase in debt issuance in the higher-risk segments. In the emerging markets capital inflows rose. In the euro area, the sovereign yield spreads of the countries most affected by the financial tensions fell. In Spain's case, the 10-year government bond yield and the related spread over the German benchmark, which stood at 5.4% and 400 bp at end-November 2012, fell to around 4.3% and 305 bp, respectively, by end-April. The credit risk premia on fixed-income securities issued by financial and non-financial corporations likewise fell. Access by Spanish banks to wholesale funding also improved, especially at the start of the year, as illustrated by the rebound in issuance figures in January and the decline in the recourse to Eurosystem liquidity.

The emerging economies picked up in Q4, following the slump in mid-2012

As regards the latest economic developments, the emerging economies picked up moderately in 2012 Q4 following the slump in mid-2012, the outcome of the pass-through of tensions from the euro area and from the decline in external demand further to the weakening in global trade. This recovery contributed to dispelling the risk that certain economies of substantial weight in the world economy, such as China, might be undergoing a more significant slowdown, with repercussions for global growth. Some countries, such as Argentina and Venezuela, posed specific risks, in the latter case in the form of a currency devaluation at the start of the year.



SOURCE: Datastream, Reuters and Bloomberg.

a Euro area: 5-year iTraxx Europe Senior Financials. United States and United Kingdom: average 5-year CDS for commercial banks.  
Latest data: 26 April 2013.

In contrast, the main developed economies trended unfavourably during the final stretch of 2012. The rate of contraction in the euro area stepped up in quarter-on-quarter terms to 0.6%

In contrast, the economic performance of the main developed countries was less dynamic during the final stretch of 2012, with further declines in GDP in the United Kingdom and moderate growth in Japan and the United States, conditioned in the case of the latter by the ongoing fiscal sequester. However, in the opening months of 2013 some rebound in activity in some of these economies is discernible, particularly in the United States, and, in any event, they are expected to sustain a modest recovery. In the euro area, there was a step-up in the rate of decline of GDP in 2012 Q4, falling by 0.6% in quarter-on-quarter terms, compared with the decline of 0.1% three months earlier, and entailing a contraction of 0.9% year-on-year (see Chart 1.2.A). The preliminary data for 2013 Q1 suggest an easing in the rate of contraction of economic activity, albeit at a possibly more moderate rate than three months earlier. Against this backdrop, the ECB's March macroeconomic projections augur a decline in GDP in a range of between 0.9% and 0.1% for 2013, and growth between 0% and 2% for 2014, somewhat lower rates than those in the December exercise.

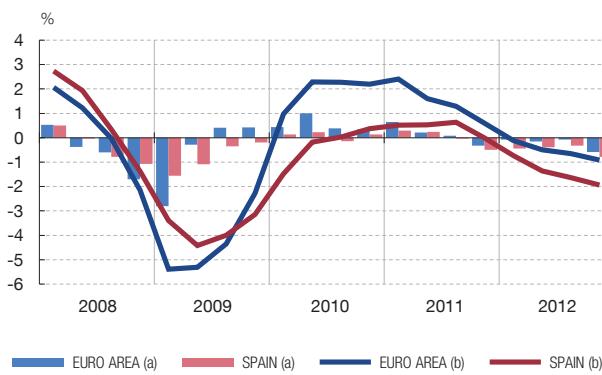
In Spain the quarter-on-quarter decline in GDP also stepped up (to 0.8%) while job destruction continued

In Spain, GDP posted a quarter-on-quarter decline of 0.8% in Q4 compared with the 0.3% decline in the three previous months, while the year-on-year contraction was 1.9% (see Chart 1.2.A). In this setting there was some quickening in the pace of job destruction in the final months of 2012, up to a rate of 4.8% year-on-year, according to the EPA (Spanish Labour Force Survey), placing the unemployment rate at the end of last year at 26% (see Chart 1.2.B). The data available for the opening months of 2013 point to a prolongation of the contractionary

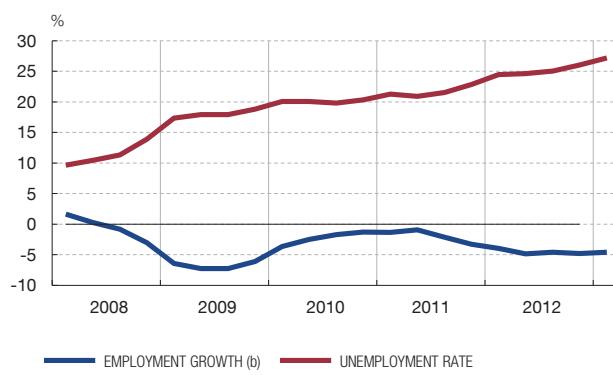
## GDP AND EMPLOYMENT

CHART 1.2

A. YEAR-ON-YEAR AND QUARTER-ON-QUARTER GDP GROWTH



B. YEAR-ON-YEAR EMPLOYMENT GROWTH AND UNEMPLOYMENT RATE. EPA DATA



SOURCES: INE, Eurostat and Banco de España.

- a Quarter-on-quarter rates.
- b Year-on-year rates.

## SYSTEMIC RISK INDICATOR

BOX 1.1

One of the issues highlighted by the financial crisis that broke in summer 2007 has been the systemic dimension of financial risk. There is broad consensus that, to prevent crises of a similar nature from arising again, it is worth identifying, evaluating and monitoring the level of systemic risk existing in the financial sector. Accordingly, various international institutions and agencies are assigning resources to develop models and instruments to this end, since this is considered to be fundamental from the standpoint of macroprudential supervision. Along these lines, the ECB has developed a systemic risk indicator which the European Systemic Risk Board (ESRB) is using as a working tool: the so-called CISS (composite indicator of systemic stress)<sup>1</sup>. In keeping with this indicator developed to assess the systemic stress situation in Europe and following its same methodology, this box presents an indicator that seeks to reflect the situation and pattern of systemic risk in Spain.

Given the multi-faceted and developing nature of the concept of systemic risk, no single definition exists; but two characteristics emerge from the definitions offered by the various international and academic institutions that have been working on the matter in recent years. Firstly, financial instability must extend throughout the financial system, and secondly, it must have the potential to exert seriously adverse consequences on the real economy. The conjunction of both circumstances identifies a situation of high systemic risk. Thus, the aim of the systemic risk indicator (SRI) is to measure the current state of and monitor the frictions, pressures and tensions (or the absence thereof) in the financial system that are potentially damaging to the real economy, and to distil this state of financial instability into a single value.

The SRI is an aggregate indicator that distils relevant information from the main segments of the financial system: the government

debt market, the money market, the securities market and the bank funding market. The level of tension in each of these markets is calculated on the basis of three individual indicators that capture symptoms of financial stress such as increased uncertainty among agents, negative investor perceptions, information asymmetries between lenders and borrowers (which heighten the problems of adverse selection and moral hazard) and flight-to-quality or flight-to-liquidity effects. In particular, the 12 individual indicators calculated for Spain are as follows:

Government debt market:

1. Volatility of the Spanish 10-year government bond.
2. Yield spread between the Spanish 10-year government bond and the German 10-year bund.
3. 5-year credit default swap on Spanish sovereign debt.

Money market:

4. Volatility of the 3-month Euribor interest rate.
5. Interest rate spread between the 3-month Euribor and the 3-month French bond.
6. Marginal lending facility requested at the European Central Bank.

<sup>1</sup> The design and formulation of this indicator is explained in detail in D. Hollo, M. Kremer and M. Lo Duca, "CISS – A Composite Indicator of Systemic Stress in the Financial System", European Central Bank, Working Paper 1426, March 2012.

## Securities market:

7. Volatility of the non-financial sector market index in Spain.
8. Maximum loss (in a period of two years) of the non-financial sector market index in Spain.
9. Volatility of IBEX 35 options.

## Bank funding market:

10. Volatility of idiosyncratic banking sector returns relative to IBEX 35 returns.
11. Yield spread between Spanish private-sector bonds and Spanish 10-year government debt.
12. Maximum loss (in a period of two years) of the financial sector market index in Spain multiplied by the inverse of the price-to-book ratio of the same index.

Drawing on the daily data, weekly averages of the indicators are calculated and converted into their corresponding values in the

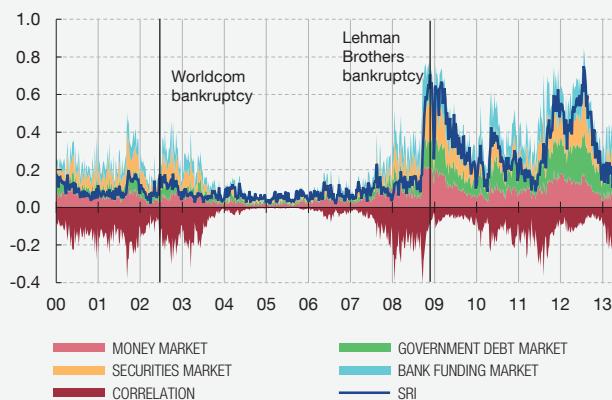
cumulative distribution function. As a result, 12 individual stress indicators are obtained, which are measured on an interval scale with range [0, 1] (properties that the aggregate indicator inherits). The simple mean of the three indicators in each market is the sub-index that reflects the stress existing in that market. The aggregation of the four sub-indices in the SRI is carried out as follows:

- a) The sub-indices are aggregated bearing in mind their time-varying cross-correlations, whereby greater weight is placed on situations in which high stress prevails concurrently on several markets.
- b) The same weighting is assigned to each market<sup>2</sup>: government debt market: 25%; money market: 25%; securities market: 25%; and bank funding market: 25%.

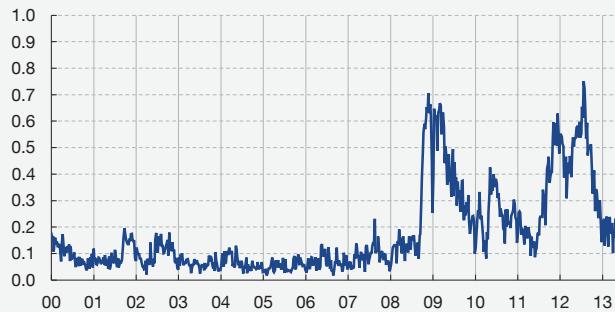
Panel A presents the SRI disaggregating the contribution of each component at each point in time. The upper limit of the contributions

<sup>2</sup> Tests were conducted with the weighting used in the indicator proposed by the ECB (CISS), which differs for each market (depending on its relative significance measured via the impact on the growth of industrial production of different VAR model specifications), and the results were very similar.

A. DECOMPOSITION OF THE SYSTEMIC RISK INDICATOR (SRI)



B. SYSTEMIC RISK INDICATOR (SRI)



C. SYSTEMIC RISK INDICATOR FROM JANUARY 2012



SOURCE: Own calculations using data from Datastream, ECB and Banco de España.

represents the value an indicator would have if it were simply the mean of the sub-indices, but without taking into account its correlations structure (implicitly assuming a perfect correlation between the sub-indices). The difference between this simple indicator and the SRI reflects the impact of the cross-correlations, which is depicted in the panel in the area below zero. Thus, in periods of very high (or very low) tension in all markets at once, the cross-correlations increase and the SRI draws closer to the simple indicator. Accordingly, an individual indicator or an aggregate indicator that does not take into account the effect of the cross-correlations is skewed towards overestimating the level of financial stress in normal situations when the correlations are moderate. For example, it can be seen that the difference in the simple indicator's values in the Worldcom bankruptcy from its values in the Lehman Brothers failure is not very high, while this difference is much more marked in the SRI. Moreover, an advantage of the SRI is that it draws together in a single indicator the information from four different but related markets, and its

weekly frequency provides for continuous and updated monitoring of the systemic risk situation in the financial system. However, the SRI does no more than distil in a sophisticated fashion the information from these markets; accordingly, it is not a leading indicator of financial instability and nor does it provide information on the reasons underlying changes in market sentiment. That is to say, although it signals situations in which the tension on financial markets is higher, it does not pinpoint the ultimate reasons for these rises.

The changes in the SRI (see Panel B) reveal that, over recent years, systemic risk has held at high levels, with a significant rise in late 2011 (which preceded the ECB's intervention via the LTROs) and with systemic risk peaking in Spain in July 2012 (ahead of the signing of the MoU with the European authorities). In recent months, systemic risk has fallen and has held stable at lower (see Panel C) though still higher and more variable levels than those shown in the period prior to the crisis.

course of economic activity, with the unemployment rate rising to 27.2% and with the Banco de España March projections showing a 1.5% fall-off in GDP for 2013 and a moderate recovery for 2014, with an increase of 0.6%.<sup>1</sup>

The slow deleveraging of households and non-financial corporations in Spain continues, while private-sector income contracts and household wealth declines

In recent months the debt ratios of the non-financial private sector have continued slowly to decline, since the fall in liabilities has been partly countered by the decline in income. Figures from the quarterly survey of the Central Balance Sheet Data Office reveal a marked deterioration in the reporting corporations' profits during 2012, with a fall in net ordinary profit of 11.2%, which led to a further fall-off in profitability ratios. For households, in addition to seeing income decline and unemployment increase, net wealth continued to fall, a development associated with the 10% decline in house prices over the course of last year. The resulting outlook is one of high financial pressure in the households and non-financial corporations sector.

At the same time, the general government debt and interest burden continue to grow in terms of GDP

In the case of general government, liabilities have continued growing at a brisk pace of close to 20% at end-2012, as a result of deficit-financing needs and of the loan granted by the ESM to the FROB under the banking system recapitalisation and restructuring process. Along with the sluggishness of economic activity, this has translated into an increase in the debt/GDP ratio to 84.2% at the close of the year (almost 7 pp up on three months earlier) and in the interest burden (3.1% of GDP, compared with 2.9% in September).

Despite the improvement on markets, the situation has not fully normalised and risks linked to economic developments persist

In sum, since the publication of the last FSR, conditions on financial markets have improved, though there has been a partial turnaround in recent weeks. The market situation has not fully normalised and uncertainty remains high, while the risks linked to economic developments persist.

<sup>1</sup> Spanish Economic Projections Report. Economic Bulletin, March 2013.



## 2 DEPOSIT INSTITUTIONS

### 2.1 Banking risks

Consolidated total assets fell in December, in particular at Group 1 institutions, ...

... this fall primarily stemming from the reduction in lending to the private sector, which was affected by the transfer of assets to the Sareb

Financing to general government increased, with a rise in its weight in the balance sheet of deposit institutions

Doubtful assets grew more moderately than in previous periods, largely due to the transfer of assets...

The consolidated balance sheet of deposit institutions, which includes their business in Spain and that of their subsidiaries abroad, shows that **total assets** fell in 2012 at a year-on-year rate of 0.6% (see Chart 2.1). This modest decline in total assets was relatively broad-based across institutions, although the so-called Group 1 institutions recorded sharper declines. This group of institutions accounts for 60% of the year-on-year reduction in consolidated assets, with a fall of 3% in December 2012. Group 1 is made up of those institutions owned by the Fund for the Orderly Restructuring of the Banking Sector<sup>1</sup> (FROB) at the time the stress tests were performed, which on 31 December 2012 transferred their real-estate assets to the Asset Management Company for Assets Arising from Bank Restructuring (Sareb), as agreed in the Memorandum of Understanding (MoU) for financial assistance to Spanish banks and in the restructuring plans approved by the European Commission on 28 November 2012 (see Chart 2.1.A for a breakdown of the amounts transferred to the Sareb). Box 2.1 sets out chronologically the various measures adopted in the process of restructuring the banking sector. It should be noted that, from the viewpoint of the analysis, the effects of this process reduce the comparability of the data presented in this Report.

The main factor in the reduction in the total assets of the banking sector was the year-on-year fall in financing (credit and fixed income) to the private sector, which declined at a year-on-year rate of 5.6% in December 2012, its relative weight in the balance sheet falling from 63.9% in December 2011 to 60.7% in December 2012 (see memorandum item of Table 2.1). Within financing to the private sector, credit and fixed income behaved differently. Credit to the private sector fell by 7.6%, a fall that is concentrated in business in Spain, which is analysed in greater depth later on in this Report. This behaviour of credit to the private sector was affected by the transfer of assets from Group 1 institutions to the Sareb. Thus, while the decline in credit was broad-based across institutions, its intensity was significantly greater among Group 1 institutions, which account for 3.5 percentage points (pp) of the 7.6% fall. The trend in fixed income to the private sector was, however, positive, and in December 2012 year-on-year growth of 35% was observed. This partly reflects the transfer of assets to the Sareb, since the Group 1 institutions received State-guaranteed bonds from the Sareb, in consideration for the transferred assets.

Financing to general government, which includes credit and fixed income, increased by 14.5% year-on-year in December 2012, there being no significant difference between the rate of growth of credit and that of fixed income. Its weight in the consolidated balance sheet increased last year, from 10.3% to 11.8% (see memorandum item of Table 2.1).

Total doubtful assets at the consolidated balance sheet level grew by 18.9% year-on-year in December 2012 (see memorandum item of Table 2.1), a more moderate rate than that observed in June 2012 (34.5% year-on-year) and that in December 2011 (27% year-on-year). As detailed below in this Report when analysing the evolution of doubtful assets in

<sup>1</sup> The Group 1 institutions are Banco Financiero y de Ahorros, S.A., Catalunya Banc, S.A. and NCG Banco, S.A. and, for the purposes of this report, in those data that relate to 2012, Banco de Valencia, an institution that was sold in late December 2012 to CaixaBank (see [http://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/NotasInformativas/Briefing\\_notes/en/notabe26.12.12en.pdf](http://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/NotasInformativas/Briefing_notes/en/notabe26.12.12en.pdf)). The Group 2 institutions (BMN, Liberbank, Caja 3 and CEISS) transferred their assets to Sareb on 28 February, so the December 2012 figures do not reflect that operation.

**CONSOLIDATED BALANCE SHEET.  
DEPOSIT INSTITUTIONS**

**TABLE 2.1**

| Assets   | Dec-12           | Change            | Relative         | Relative         |
|--|------------------|-------------------|------------------|------------------|
|  |                  | Dec-12/<br>Dec-11 | weight<br>Dec-11 | weight<br>Dec-12 |
|  | (€m)             | (%)               | (%)              | (%)              |
| Cash and balances with central banks           | 183,005          | 18.7              | 4.0              | 4.7              |
| Loans and advances to credit institutions      | 236,185          | 21.0              | 5.0              | 6.1              |
| General government                             | 114,823          | 13.6              | 2.6              | 3.0              |
| Other private sectors                          | 2,190,081        | -7.6              | 60.9             | 56.6             |
| Debt securities                                | 573,691          | 15.7              | 12.7             | 14.8             |
| Other equity instruments                       | 38,960           | -12.8             | 1.1              | 1.0              |
| Investments                                    | 53,911           | 0.8               | 1.4              | 1.4              |
| Derivatives                                    | 263,351          | 9.4               | 6.2              | 6.8              |
| Tangible assets                                | 47,315           | -7.0              | 1.3              | 1.2              |
| Other (a)                                      | 165,939          | -11.1             | 4.8              | 4.3              |
| <b>TOTAL ASSETS</b>                            | <b>3,867,261</b> | <b>-0.6</b>       | <b>100</b>       | <b>100</b>       |
| <b>MEMORANDUM ITEMS</b>                        |                  |                   |                  |                  |
| Financing to private sector                    | 2,347,178        | -5.6              | 63.9             | 60.7             |
| Financing to general government                | 457,060          | 14.5              | 10.3             | 11.8             |
| Total doubtful assets                          | 195,370          | 18.9              | 4.2              | 5.1              |
| Total doubtful assets ratio                    | 6.3              | 109 (c)           |                  |                  |
| Provisions for bad debts and country risk      | -133,143         | 41.6              | -2.4             | -3.4             |
| Liabilities and equity                         | Dec-12           | Change            | Relative         | Relative         |
|  |                  | Dec-12/<br>Dec-11 | weight<br>Dec-11 | weight<br>Dec-12 |
|  | (€m)             | (%)               | (%)              | (%)              |
| Balances of central banks                      | 378,933          | 82.8              | 5.3              | 9.8              |
| Deposits of credit institutions                | 422,420          | -9.6              | 12.0             | 10.9             |
| General government                             | 94,682           | 6.1               | 2.3              | 2.4              |
| Other private sectors                          | 1,719,890        | -2.9              | 45.5             | 44.5             |
| Marketable debt securities                     | 492,332          | -6.3              | 13.5             | 12.7             |
| Derivatives                                    | 244,123          | 9.2               | 5.7              | 6.3              |
| Subordinated debt                              | 61,385           | -31.6             | 2.3              | 1.6              |
| Provisions for pensions, tax and other         | 36,105           | 10.6              | 0.8              | 0.9              |
| Other (a)                                      | 202,269          | -22.6             | 6.7              | 5.2              |
| <b>TOTAL LIABILITIES</b>                       | <b>3,652,139</b> | <b>-0.4</b>       | <b>94.3</b>      | <b>94.4</b>      |
| <b>MEMORANDUM ITEMS</b>                        |                  |                   |                  |                  |
| Eurosystem net lending (b)                     | 259,998          | 5.7               | 6.7              |                  |
| Minority interests                             | 18,141           | -19.9             | 0.6              | 0.5              |
| Valuation adjustments relating to total equity | -11,807          | —                 | -0.3             | -0.3             |
| Own funds                                      | 208,787          | -1.5              | 5.4              | 5.4              |
| <b>TOTAL EQUITY</b>                            | <b>215,122</b>   | <b>-3.6</b>       | <b>5.7</b>       | <b>5.6</b>       |
| <b>TOTAL LIABILITIES AND EQUITY</b>            | <b>3,867,261</b> | <b>-0.6</b>       | <b>100</b>       | <b>100</b>       |

SOURCE: Banco de España.

a The remaining assets and liabilities entries not explicitly considered, including valuation adjustments, are included in "Other".

b Difference between funds received in liquidity providing operations and funds delivered in absorbing operations. March 2013 data (latest available) and March 2012 data to maintain the year-on-year comparison.

c Difference calculated in bp.

...to the Sareb, while among other institutions the rate of increase rose slightly

the case of credit to the resident private sector in Spain, the moderation in the rate of increase of doubtful assets is a consequence of the transfer of assets to the Sareb by Group 1 institutions, since a large number of these transferred assets were real-estate loans classified as doubtful.

During 2012 a series of measures were taken to reorganise, recapitalise and restructure the Spanish banking system. The aim of this Box is to list in chronological order the main milestones in this process since the beginning of 2012 to date.

- Between February and May 2012 two Royal-Decree Laws were approved, Royal-Decree Law 2/2012 of 3 February 2012 and Royal-Decree Law 18/2012 of 11 May 2012 (the latter was validated by Law 8/2012 of 30 October 2012), to set out new provisioning requirements to cover the impairment of assets related to the banks' real estate activity.
- In May 2012 it was agreed to perform an independent evaluation to assess the resilience of the Spanish banking system's balance sheets. The project comprised two parts: the first being an aggregate top-down evaluation of banks' balance sheets in Spain and of their resilience in the face of an adverse scenario and the second consisting of an assessment of asset quality and a stress test to determine capital needs bank by bank (bottom-up exercise).
- On 21 June 2012 the results of the top-down analysis were published for the Spanish banking system and then the second phase of the external assessment of the banking system began (bottom-up exercise).
- On 20 July the Spanish and European authorities signed a Memorandum of Understanding (MoU) on financial sector Policy Conditionality which included a commitment of external financial assistance for the restructuring and recapitalisation of the Spanish banking sector of up to €100 billion, that would be based on the diagnostics arising from the external assessments under way.
- In August Royal Decree-Law 24/2012 of 31 August 2012 on credit institution restructuring and resolution was approved (which was subsequently incorporated into Law 9/2012 of 14 November 2012). This Royal Decree-Law strengthened the mechanism available to the Spanish authorities to reinforce and clean up the financial system and legally enshrine the commitments set out in the MoU.
- On 28 September 2012 the results of the bottom-up bank-by-bank stress tests were published. As a result of this analysis, banks which did not have additional capital needs (Group 0) were determined and all those banks which were not already majority-owned by the FROB (Group 1) were asked to prepare recapitalisation plans including the measures to cover the aforementioned needs.
- On 31 October, based on the study of the plans submitted, it was specified which banks would be capable of covering capital needs using their own resources by the end of 2012 (Group 3) and which banks were expected to have recourse to public aid in the framework of their recapitalisation processes (Group 2).
- On 28 November 2012, following approval by the Banco de España on 27 November 2012, the European Commission approved the plans of banks in which the FROB has a majority stake (Group 1).
- On 20 December 2012, following approval by the Banco de España, the European Commission approved the restructuring plans of Group 2 banks.
- On 26 December 2012 the FROB implemented the recapitalisation of the Group 1 banks.
- On 31 December 2012 the Group 1 banks transferred their real estate assets to Sareb.
- On 28 February 2013 the Group 2 banks transferred their real estate assets to Sareb.
- On 12 March 2013 the FROB formalised the capital injections for BMN, Liberbank and Caja3.
- On 22 March 2013 the Governing Committee of the FROB estimated the average haircuts to be applied to various hybrid financial instruments in the framework of the burden-sharing exercise at Group 1 banks.

In the case of other institutions, the rate of growth of total doubtful assets at the consolidated level stepped up somewhat during 2012, from 22.2% year-on-year in 2011 to 25.1% in December 2012. In any event, the reduction in credit to the private sector and the increase in doubtful assets led to a rise in the overall doubtful assets ratio<sup>2</sup> in the consolidated balance sheet of deposit institutions as a whole, from 5.2% in December 2011 to 6.3% in December 2012. Provisions for bad debts and country risk increased notably during 2012 (with a

<sup>2</sup> For the purposes of this Report the "ratio de morosidad" and the "ratio de dudosos" are considered to be equivalent concepts (both are translated as "doubtful assets ratio"). In both cases they include assets that are doubtful by reason of being past-due (by more than 90 days) along with other transactions that are classified as doubtful even though they are not 90 days past due.

year-on-year rate of change of 41.6% in December 2012; see memorandum item of Table 2.1), largely as a consequence of the application of Royal Decree-Laws 2/2012 and 18/2012.

Tangible assets show a year-on-year decline of 7% (see Table 2.1), which is largely explained by the reduction in assets for own use. This situation was more marked among Group 1 institutions.

The assets heading “Other” includes all those consolidated balance sheet items that are not explicitly shown in Table 2.1, including the amount of impairment allowances (mostly provisions for bad debts and country risk). Accordingly, this residual heading is made up of positive and negative elements. Its decline in December 2012 (11.1% year-on-year, see Table 2.1), is largely explained by the above-mentioned increase in provisions for bad debts and country risk, which was more marked in the case of Group 1 institutions.

On the liabilities side, the balances of central banks rose, owing to the transactions of institutions with the Eurosystem ...

Notable on the liabilities side was the significant growth in balances of central banks, which increased by 82.8% year-on-year in December 2012. This increase reflects institutions’ operations with the Eurosystem, which has provided liquidity at longer maturities than usual (LTROs) to euro area institutions owing to the tensions and dysfunctions in financial markets, which in 2012 continued to be reflected in negative year-on-year rates of change in the deposits of credit institutions (-9.6% year-on-year), as well as in marketable debt securities (-6.3% year-on-year) and subordinated debt (-31.6% year-on-year). These general trends are somewhat more marked for Group 1 institutions.

The increase in balances of central banks (82.8%) was less sharp than in December 2011 (118%), and especially than in June 2012, when the year-on-year rate of change reached 370%. This behaviour of the growth rate is explained by the decline in borrowing from the Eurosystem observed in recent months. Thus, although Eurosystem net lending in March 2013 amounted to 6.7% of total assets in December 2012, a higher percentage than in March 2012 (5.7%), it was below the levels seen in August 2012, when this percentage reached 9.7% of the total June 2012 consolidated balance sheet. This reduction in borrowing from the Eurosystem is the result of a certain improvement in wholesale financial markets in the euro area, especially since the beginning of 2013. As analysed in greater detail subsequently, this improvement has enabled various Spanish institutions to resume issuance on such markets.

...while the behaviour of private sector deposits was more favourable than in previous periods

As regards financing conditions, private-sector deposits<sup>3</sup> are behaving more favourably than they were in mid-2012. From the viewpoint of the consolidated balance sheets of deposit institutions, their year-on-year rate of change in December 2012 was -2.9% (see Table 2.1), a lower negative rate than in June 2012 (-4%). More importantly, and as analysed subsequently in detail, the improvement, in terms of financing through private-sector deposits, is especially discernible in the deposits of non-financial firms and households, which have reversed the trend of slight contraction that had been observed since mid-2012, by starting to show slightly positive rates of change in recent months (see Chart 2.1.B). The latest data, relating to March, show that the year-on-year rate of change in the deposits of non-financial firms and households reached 2.7% that month.

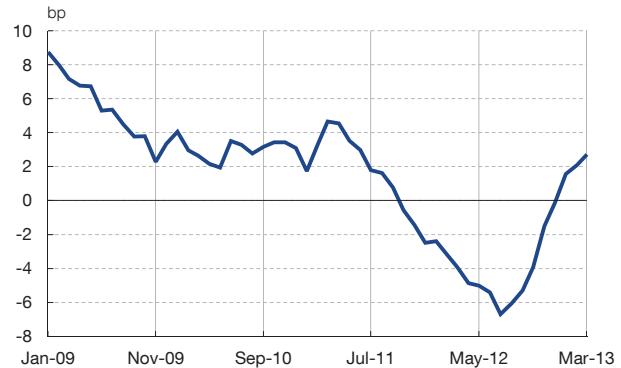
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<sup>3</sup> The total deposits of the private sector include operations (such as those relating to the asset-backed funds or companies issuing preference shares) which do not appropriately reflect the retail financing of institutions. Accordingly, and as analysed in detail below, retail financing is best represented by the deposits of households and non-financial corporations. For more information on this issue, see [http://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/NotasInformativas/Briefing\\_notes/en/notabe19.09.12en.pdf](http://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/NotasInformativas/Briefing_notes/en/notabe19.09.12en.pdf)

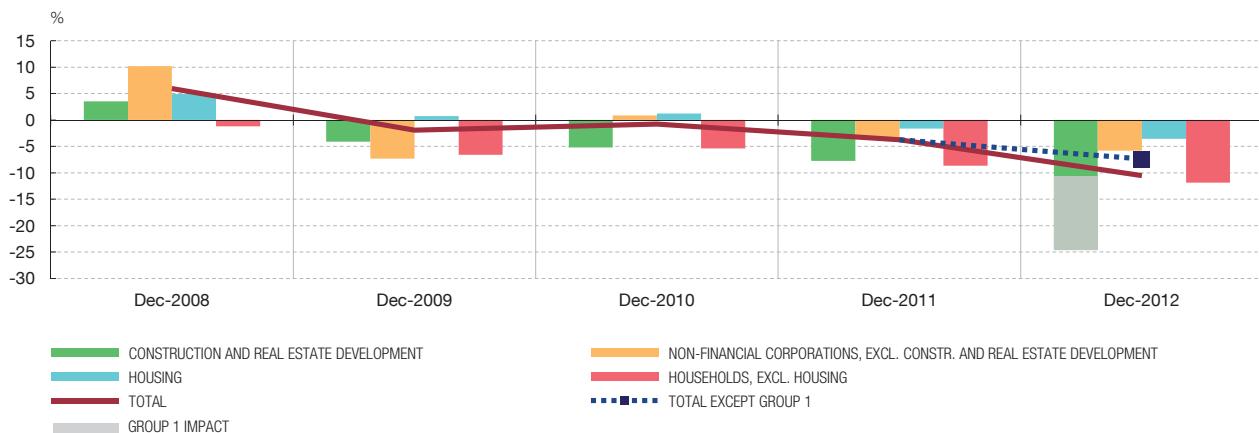
A. VOLUMES TRANSFERRED TO SAREB

|        | Group 1<br>Dec-2012 | Group 2<br>Feb-2013 | Total   |
|--------|---------------------|---------------------|---------|
| <hr/>  |                     |                     |         |
| Loans  |                     |                     |         |
| Gross  | 54,520              | 20,071              | 74,591  |
| Net    | 28,313              | 11,056              | 39,369  |
| <hr/>  |                     |                     |         |
| Assets |                     |                     |         |
| Gross  | 24,358              | 7,172               | 31,530  |
| Net    | 8,397               | 2,967               | 11,364  |
| <hr/>  |                     |                     |         |
| Total  |                     |                     |         |
| Gross  | 78,878              | 27,243              | 106,121 |
| Net    | 36,710              | 14,023              | 50,733  |

B. YEAR-ON-YEAR RATE OF CHANGE IN HOUSEHOLD AND NON-FINANCIAL FIRMS DEPOSITS



C. YEAR-ON-YEAR RATE OF CHANGE IN CREDIT TO THE RESIDENT PRIVATE SECTOR BY SECTOR OF ACTIVITY



SOURCE: Banco de España.

Equity fell, reflecting restructuring processes in 2012

Credit to the resident private sector in Spain showed a decline in 2012, which was exacerbated by the transfer of loans to the Sareb.

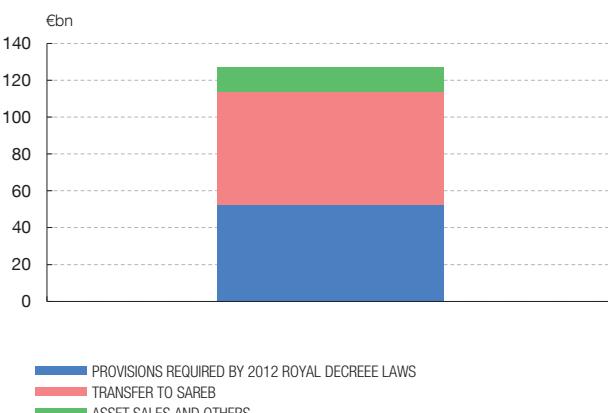
The total equity of deposit institutions fell at a year-on-year rate of 3.6% in December 2012 (see Table 2.1), broadly reflecting both the restructuring processes taking place during 2012 and also the losses recorded by some institutions during the year, which were particularly heavy among the Group 1 institutions, as analysed below. In any event, the weight of equity in total assets remained practically unchanged between 2011 and 2012, at around 5.6%.

The year-on-year rate of change of credit to the resident private sector in business in Spain, according to individual financial statement data, was -10.6% in December 2012 (see Chart 2.1.C). This reduction in credit was exacerbated by the transfer in December of loans linked to real-estate development activities from the so-called Group 1 institutions to the Sareb, the gross amount of which was approximately €55 billion (see Chart 2.1.A). Excluding Group 1, the year-on-year rate of change in credit to the resident private sector was 7% (see Chart 2.1.C), a figure that shows that, despite the one-off transaction mentioned, credit to the resident private sector continues to contract. Indeed, in March 2013, credit to the resident private sector (excluding the Group 2 institutions, which transferred their assets in February 2013) held at a negative year-on-year rate of change of 7.1%.

## A. REAL ESTATE EXPOSURE NET OF PROVISIONS



## B. FACTORS ACCOUNTING FOR THE REDUCTION IN EXPOSURE IN 2012



SOURCE: Banco de España.

- a For the purposes of this analysis the institutions subject to the last stress tests of the Spanish banking sector (bottom-up exercise) are considered. The transfer from the Group 2 institutions to Sareb in February is included.

The contraction extended to all lending purposes ...

The contraction in credit extends to all borrowers (individuals and non-financial corporations), and to all the sectors of non-financial corporations.

... both in the case of individuals ...

Credit to individuals fell by 4.9% year-on-year in December 2012, as against a year-on-year decline of 2.8% a year earlier. Within credit to individuals, that for purposes other than house purchase continues to show stronger negative rates of change (-11.5% year-on-year in December 2012), as against that granted for house purchase, which declined by 3.6% in December 2012, relative to the same period a year earlier (see Chart 2.1.C).

... and in the case of non-financial corporations

Credit to non-financial firms fell in December 2012 from the same period a year earlier by 14.6%, a rate of change that is affected by the above-mentioned loan transfer from Group 1 institutions to the Sareb. Excluding the impact of this transfer, the year-on-year rate of change would have been approximately -8%.

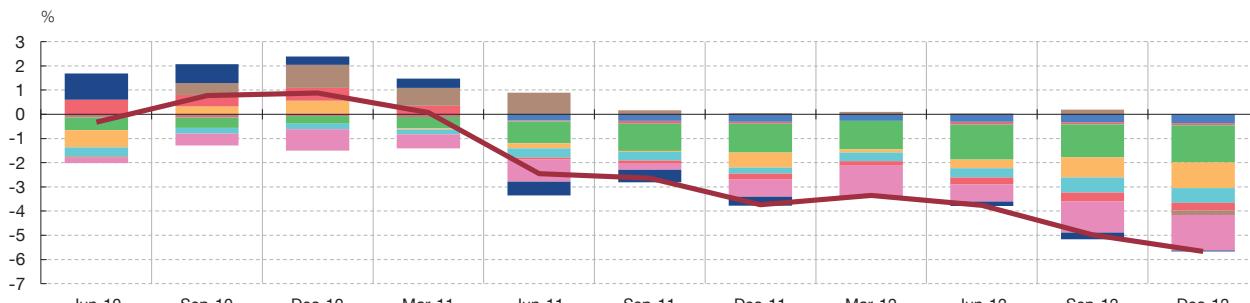
The loans transferred to the Sareb are linked to real-estate development. This is an important reason why the data for December 2012 relating to the stock of loans reflect to a greater extent the varied behaviour that had already been observed among non-financial firms, whose credit showed more significant reductions for construction and real-estate development activities, and also reductions, although less intense ones, for other sectors (see Chart 2.1.C).

In construction and real-estate development the decline was more significant, mainly due to the transfer of loans from Group 1...

As regards construction and real-estate development, the reduction in credit in December 2012 was 24.5%, a significant part of which stemmed from the above-mentioned loan transfers made by Group 1 institutions (see Chart 2.1.C). Excluding these institutions from the analysis, and therefore only considering those others that did not make transfers to the Sareb in December 2012, the year-on-year fall in credit to construction and real-estate development in December 2012 was 10.2%. This was a steeper fall than that recorded for the same set of institutions a year earlier (-7.9%).

The reduction in the exposure of the banking sector to the construction and real-estate development sector is most apparent when the impairment allowances made during 2012 are considered. Thus, the fall in the exposure to real-estate activities, taking into

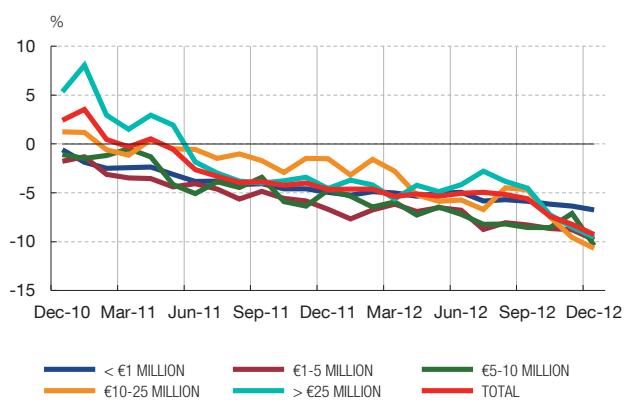
A. CONTRIBUTIONS TO THE YEAR-ON-YEAR RATE OF CHANGE IN CREDIT TO THE RESIDENT PRIVATE SECTOR OF SECTORS OF ACTIVITY EXCLUDING CONSTRUCTION AND REAL ESTATE DEVELOPMENT



B. ACCEPTANCE RATES FOR CREDIT APPLICATIONS OF NON-FINANCIAL FIRMS, EXCLUDING CONSTRUCTION AND REAL ESTATE DEVELOPMENT, BY GROUP OF INSTITUTIONS (a)



C. YEAR-ON-YEAR RATE OF CHANGE IN CREDIT TO NON-FINANCIAL CORPORATIONS, EXCLUDING CONSTRUCTION AND REAL ESTATE DEVELOPMENT, BY SIZE OF CORPORATION (b)



SOURCE: Central Credit Register (CCR) and Banco de España.

- a Non-financial firms which apply for a loan to an institution with which they are not working or they have not maintained a relationship in the last three months. The acceptance rate is defined as the ratio between the transactions accepted by deposit institutions and the total applications received in a particular month.  
b Corporation size is proxied by the volume of bank debt reported to the Banco de España Central Credit Register.

consideration both loans and foreclosed assets, net of the valuation adjustments made (i.e. provisions), was practically 50% last year<sup>4</sup> (see Chart 2.2.A). Somewhat more than half of the reduction is explained by the transfers to the Sareb, while 40% of the reduction derives from the provisions made by institutions as a consequence of RDL 2/2012 and RDL 18/2012 (see Chart 2.2.B).

... while other credit, not being affected by this transfer, continued to fall across the various sectors

Credit to non-financial corporations other than those in construction and real-estate development was not affected by the transfers made to the Sareb. The December 2012 data also show that the decline continued, at a year-on-year rate of 5.6%, which was a stronger rate than a year earlier (-3.7%). Also, this trend was broadly based across the various sectors (see Chart 2.3.A).

4 For the purposes of this analysis only those institutions that were subject to the latest stress tests carried out for the Spanish banking sector (bottom-up exercise) have been considered. These institutions account for 88% of total credit to the construction and real-estate development sector. Also included are the transfers to the Sareb from Group 2 institutions (Liberbank, CEISS, Caja3 and BMN), which were carried out in February 2013.

The acceptance rate for credit applications fell from 45% in 2006 to around 30% during the crisis

On the basis of Central Credit Register (CCR) data, it is possible to define acceptance rates for credit transactions applied for by non-financial corporations which request financing from an institution with which they are not working or with which they have not maintained a relationship in recent months. This acceptance rate is defined as the ratio between the transactions accepted by the deposit institutions and the total number of requests received in a particular month. The analysis should be considered indicative and limited. First, the set of customers used is not fully representative. Second, there may be various reasons for the changes in acceptance rates, ranging from changes in the quality of the demand for credit, to a tightening of the supply of credit by financial institutions. In any event, and considering the caveats expressed, Chart 2.3.B shows how acceptance rates for credit to non-financial corporations have fallen from levels of around 45% in 2006 to levels of around 30% during the crisis. The fall was relatively similar across sectors of activity (construction and real-estate development and the rest), although there are differences between nationalised institutions and other institutions. These differences in the behaviour of the acceptance rates of Group 1 institutions and of other institutions would appear to be mainly a consequence of the more difficult financial position of the institutions of this group in recent years.

The reduction of credit is also observed when firms are distinguished on the basis of an approximation of their size

Among non-financial corporations other than those engaged in construction and real-estate development, the reduction in credit is also observed when firms are distinguished according to an approximation of their size. The size of non-financial corporations can be approximated by the volume of bank debt reported to the CCR. On the basis of this approximation, small firms (less than €1 million of bank debt reported to the CCR) are seen to record slightly smaller falls in credit than other firms. All sizes of firms experienced a fall in credit last year, which steepened as the year passed. Also the dispersion between the different sizes of firms narrowed.

In short, the decline in credit to the private sector resident in Spain is seen across the different borrowers and branches of activity, as well as for different types of non-financial corporations. Also, an analysis of drawable credit,<sup>5</sup> which represents around 20% of total credit to non-financial corporations other than those engaged in construction and real-estate development, leads to similar conclusions, although the reduction in drawable amounts is even more marked than that in drawn-down credit. This has led to a sustained rise, of around ten percentage points, in the credit line utilisation ratio since the beginning of the crisis.

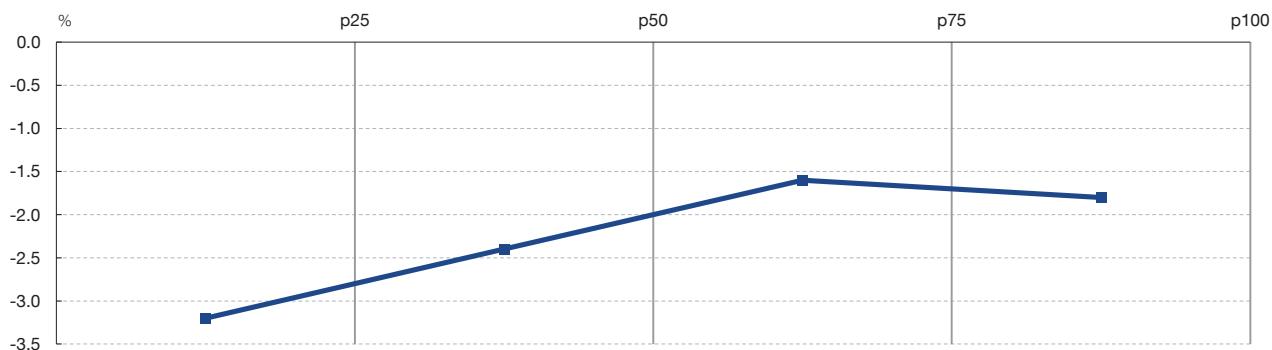
The broad-based fall in credit is due to factors such as the economic situation and the need for deleveraging in the Spanish economy

This reduction in credit is explained by various factors that are hard to disentangle. The current economic situation involves a reduction in the credit quality of firms and households, while there is a lower demand for funds owing to the difficult economic outlook, which explains the fall in productive investment. On top of this there is a structural need for the Spanish economy to deleverage following a prolonged period of notable increases in indebtedness. However, this deleveraging would have to be compatible with a flow of financing towards profitable productive activities. In this respect, the measures recently announced by the government and implemented by the ICO and the banks should be conducive to the objective of making a greater flow of credit to the economy possible.

In the case of banks, there is a certain positive...

The above results raise the question of whether there may be other elements that affect credit growth, apart from the financial position of the firms. In this respect, using June

<sup>5</sup> In a credit account, through which a certain sum is made available to the borrower, subject to the limits and conditions established in the contract, the amount drawn down is that part of such sum that has already been used, while the drawable amount is that part which has still not been used.



SOURCE: Banco de España.

a The four squares depicted show the average value of the observations comprised between the corresponding percentiles.

...relationship between the change in credit and the institution's tier 1 solvency ratio

2012 data, to avoid the impact of the transfer of credits to the Sareb and the recapitalisation of the banks with public funds, and excluding banks with atypical credit growth data owing to mergers or acquisitions, a sample of banks with market share of at least 0.2% (97% of total credit) has been ordered into quartiles on the basis of their tier 1 solvency coefficients. The largest fall in credit (-3.2% in the first quartile) year-on-year is seen to occur among those banks with a lower tier 1 solvency ratio (8.8% in the first quartile) and then, as the ratio rises, the fall in credit is seen to moderate (-2.4% at the median, -1.6% in the third quartile and -1.8% in the highest quartile). As seen in Chart 2.4, there seems to be an upward linear relationship between the solvency ratio and the change in credit, at least in the first three quartiles, so that the institutions that reduce their credit exposure most have lower levels of own funds.

It should be questioned to what extent credit growth may be influenced by refinancing and rescheduling transactions, which entail a change in the volume of credit not because new transactions have been entered into, but because the terms of existing contracts have been changed. In general, credit refinancing and rescheduling is a management policy which may be effective to resolve situations in which customers have temporary liquidity difficulties, but are able to pay in the medium term. From this perspective, in rare situations, when the real economy is in a double-dip recession, some of the refinanced and rescheduled transactions may become doubtful. Accordingly, at the international level, increasing importance is being given to transparency and informing the markets of policies and data relating to these types of transactions. In the case of Spain, the reporting of this information is already required by Banco de España Circular 6/2012 (see Box 2.2 and Chapter 3).

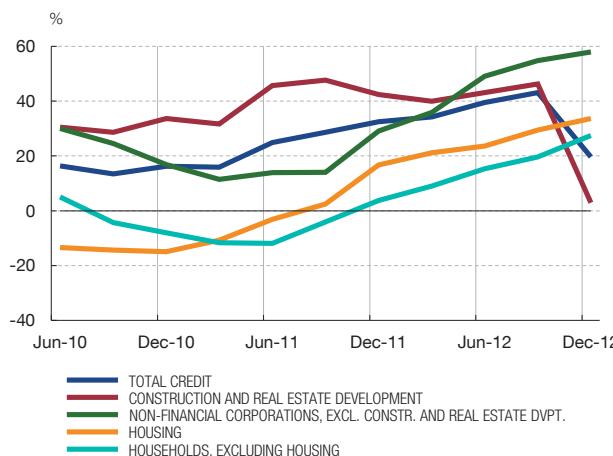
Doubtful assets in Spain grew at a lower rate than a year earlier ...

The doubtful assets of credit to the resident private sector in business in Spain, according to individual financial statement data, grew at a year-on-year rate of 19.7% in December 2012 (see Chart 2.5.A), which was lower than the year-on-year rate recorded a year earlier (32.5%).

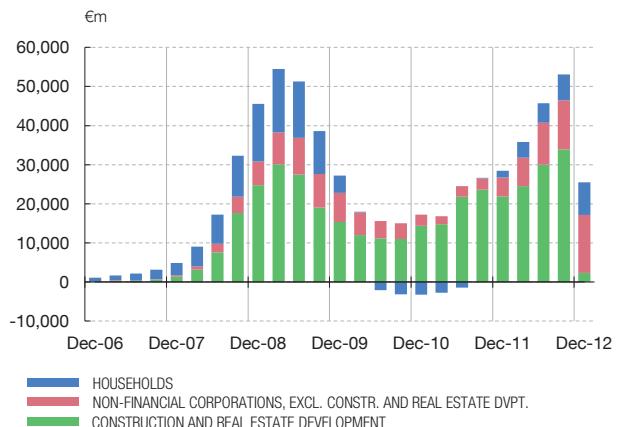
... owing to the transfer of assets to the Sareb in December 2012....

The moderation in the rate of increase of doubtful assets is explained by the transfer of assets from Group 1 institutions to the Sareb, and is therefore concentrated in the construction and real-estate development sector, which recorded a slight increase in relation to the same period a year earlier (see Charts 2.5.A and B). This transfer of assets to the Sareb explains why for Group 1 institutions there was a negative rate of change in

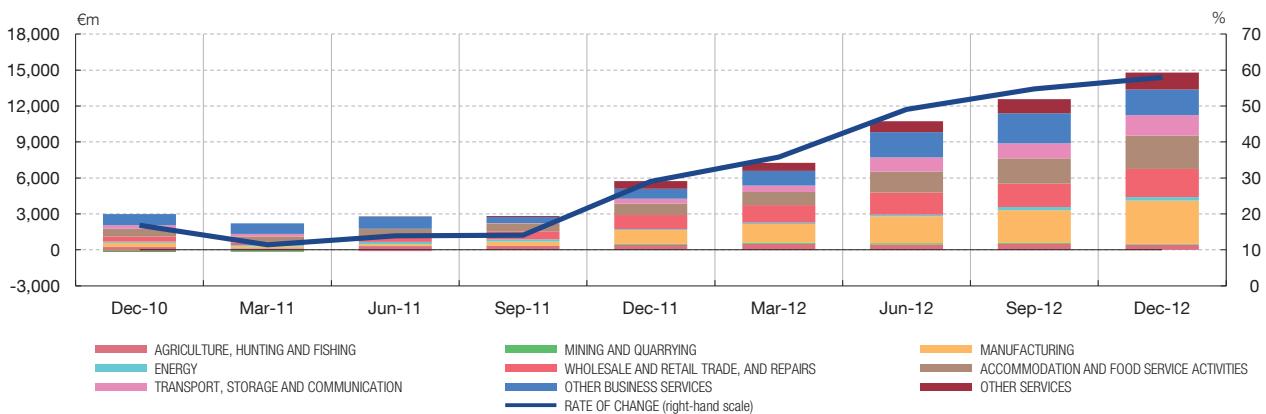
A. YEAR-ON-YEAR RATE OF CHANGE IN DOUBTFUL ASSETS



B. YEAR-ON-YEAR CHANGE IN DOUBTFUL ASSETS



C. YEAR-ON-YEAR RATE OF CHANGE IN DOUBTFUL ASSETS OF NON-FINANCIAL CORPORATIONS, EXCLUDING CONSTRUCTION AND REAL ESTATE DEVELOPMENT



SOURCE: Banco de España.

... Among other institutions the rates of increase of doubtful assets remained unchanged

In sectors other than construction and real-estate development doubtful assets increased by more than in the previous year

the doubtful assets of credit to the resident private sector, of -10.2% in December 2012, concentrated in those linked to the construction and real-estate development sector, which fell in December 2012 by 71.5%. For other institutions, the doubtful assets of credit to the resident private sector increased at a year-on-year rate of 29.3% in December 2012 (26.4% a year earlier), which was similar to the increase recorded in construction and real-estate development activities (29.4% in December 2012, as against 36.2% in December 2011).

The doubtful assets of non-financial sectors other than construction and real-estate development and of individuals continued to increase. Thus, for individuals, doubtful assets grew by 31.7% year-on-year in December 2012, as against 12.2% a year earlier. This acceleration occurred both in the case of credit for house purchase and in that of credit to finance other activities (see Chart 2.5.A). There was also an acceleration in the growth in the doubtful assets of non-financial corporations other than those engaged in construction and real-estate development (see Charts 2.5.A and B), and this acceleration was seen across the various sectors of activity (see Chart 2.5.C).

Banco de España Circular 6/2012, which amends CBE 4/2004, precisely defines what loan refinancing and rescheduling entails. Furthermore, it compels the banks to report in their notes to individual accounts the amounts of these operations as well as the classification of such operations as performing, substandard or doubtful, the related provisions and breakdown by type. This information is highly useful for ascertaining with considerable detail and depth the quality of Spanish banks' credit, which prompted discussions and raised doubts prior to the bottom-up stress test performed by an external consultant.

The refinancing and rescheduling of Spanish deposit institutions' loan portfolio amounted as a whole in December 2012, at the individual level, to €208.21 billion, 13.6% of lending to the resident private sector. 42.4% of these operations are classified as performing by the institutions, whereas 20.6% are substandard and 37% are doubtful (see Panel A). Coverage through provisions for substandard refinancing and rescheduling amounts to 18.4%, whereas in the doubtful category it is 40.6%.

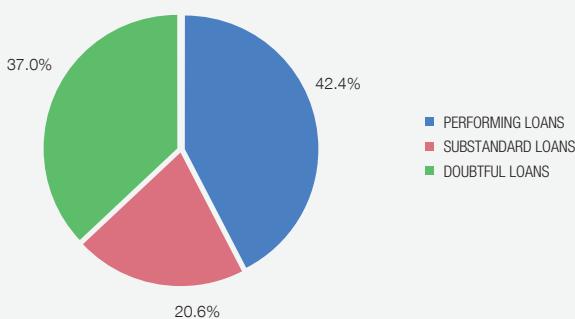
By segment, lending to general government represents 1.1% of total refinancing and rescheduling, corporate lending accounts for 69.2% and operations with households for 29.7%. Refinancing of construction and real estate development companies' loans

amounts to 33% of total lending, while mortgages represent 24.4% of the total (see Panel B). As expected (see Panel C), the biggest instances of refinancing and rescheduling are in the construction and real estate development loan portfolio (35.5%) while the credit exposure to other firms stands at 11.9%. Mortgage refinancing and rescheduling, considered as operations with individuals with an LTV of up to 100%, amount to 8.5%, but in the case of other household and general government loans the related figures are 7.4% and 2.4%, respectively.

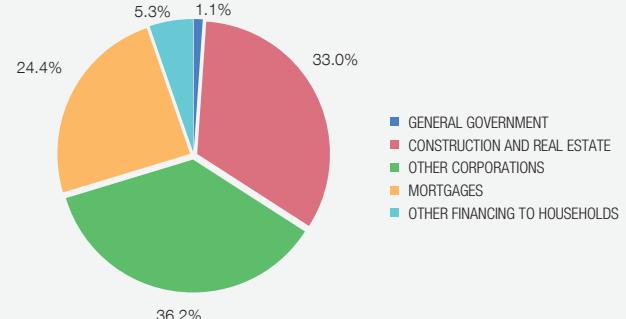
There is a high dispersion across institutions, both in the weight of loan refinancing and rescheduling as a whole, and in the distribution of these operations in terms of their quality or type and in their relative weight in loans and receivables. These differences may be indicative of different business and risk-management models, though they may also be the result of differences in banks' accounting practices. Accordingly, on 30 April the Executive Commission of the Banco de España approved a letter to be sent to banks setting out guidelines on the application of the provisions of Circular 4/2004 on loan refinancing and restructuring.<sup>1</sup>

<sup>1</sup> The documents in question can be viewed at:  
[http://www.bde.es/f/webbde/COM/Supervision/regulacion/ficheros/en/documentoCE300413\\_en.pdf](http://www.bde.es/f/webbde/COM/Supervision/regulacion/ficheros/en/documentoCE300413_en.pdf)

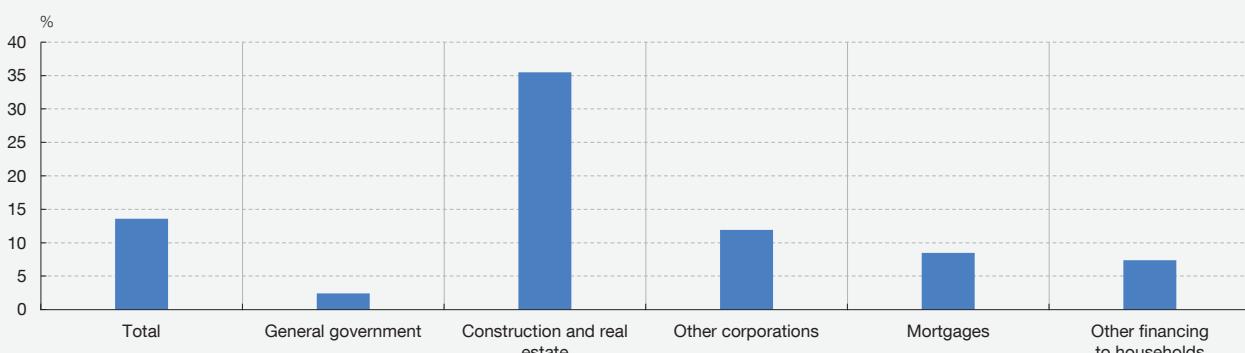
A. CLASSIFICATION OF REFINANCED AND RESTRUCTURED LOANS  
December 2012



B. SECTORAL BREAKDOWN OF REFINANCED AND RESTRUCTURED LOANS  
December 2012



C. WEIGHT OF REFINANCED AND RESTRUCTURED LOANS IN RESPECTIVE PORTFOLIOS  
December 2012

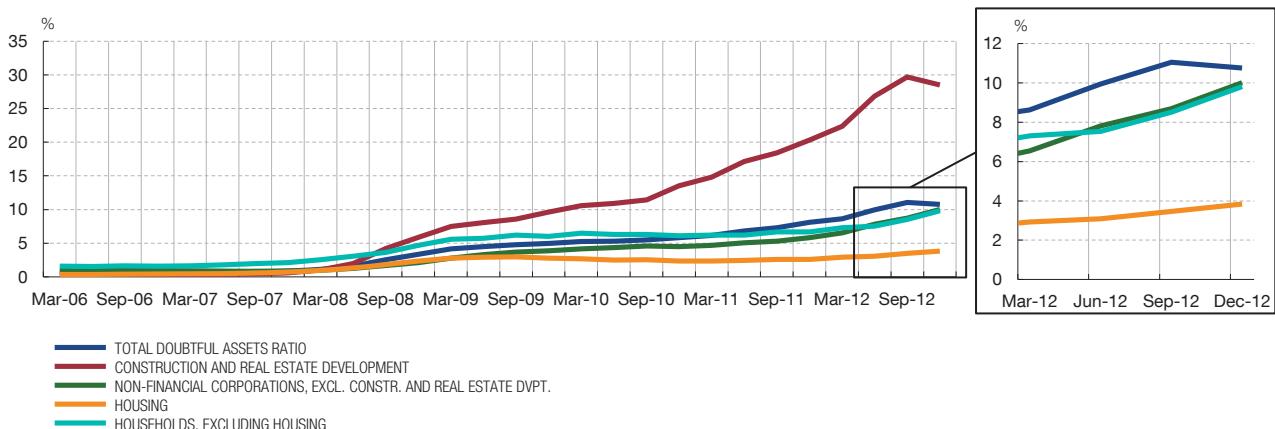


SOURCE: Banco de España.

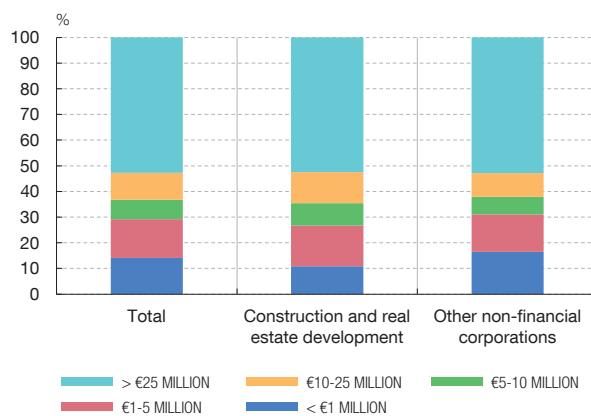
DOUBTFUL ASSETS RATIOS FOR CREDIT TO THE RESIDENT PRIVATE SECTOR  
Business in Spain, ID. Deposit institutions

CHART 2.6

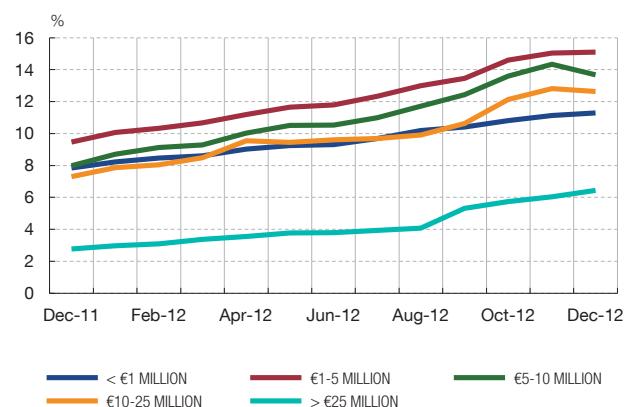
A. DOUBTFUL ASSETS RATIO, BY SECTOR OF ACTIVITY



B. CREDIT TO NON-FINANCIAL FIRMS: WEIGHTS (a)



C. DOUBTFUL ASSETS RATIO OF NON-FINANCIAL FIRMS, EXCLUDING CONSTRUCTION AND REAL ESTATE DEVELOPMENT, BY SIZE OF CORPORATION (a)



SOURCE: Central Credit Register (CCR) and Banco de España.

a Corporation size is proxied by the volume of bank debt reported to the Banco de España Central Credit Register.

The doubtful assets ratio of the resident private sector in Spain fell between November and December 2012, owing to the Sareb transfer, ...

The doubtful assets ratio for credit to the resident private sector in Spain in December 2012 was affected by various factors:<sup>6</sup> on the one hand, by the increase in doubtful assets and by the reduction in credit, which pushed up the ratio; and on the other hand, by the transfer of assets to the Sareb by the Group 1 institutions, which had the opposite effect. This latter factor is especially apparent when the growth of the doubtful assets ratio between November and December 2012 is analysed. Thus, for deposit institutions as a whole, the doubtful assets ratio for credit to the resident private sector in business in Spain fell from 11.7% in November 2012 to 10.8% in December 2012.

The latest data relating to February 2013 show a further slight fall in the ratio, to 10.7%. This decline in the doubtful assets ratio between November 2012 and February 2013 is explained by the transfers of assets to the Sareb from Group 1 institutions (in December)

6 The analysis of the doubtful assets ratio in this section differs from that carried out earlier in this Report because individual financial statements are now being analysed (as opposed to the consolidated ones in Table 2.1) and because the analysis focuses on credit to the resident private sector in Spain (in contrast to the ratio offered in Table 2.1, which also includes the doubtful assets (and credit) of credit institutions, general government and fixed-income securities).

... so that the decline was concentrated among construction and real-estate development firms and among the Group 1 institutions

For other sectors, the upward trend in the doubtful assets ratio was sustained, both in credit to individuals ...

... and in credit to non-financial corporations other than those engaged in construction and real-estate development

The doubtful assets ratio can be expected to continue to rise in 2013, although the uncertainty over the impact of a potential deterioration of bank loans is more limited

The uncertainty in wholesale funding markets intensified sporadically throughout 2012...

and from Group 2 (in February). When both these groups are excluded, the doubtful assets ratio was 10.1% in February 2013 (9.6% in November and 9.7% in December).

Distinguishing by sector of activity, and on the basis of the quarterly data available, the reduction in the doubtful assets ratio is seen to be concentrated in credit to construction and real-estate development firms, the upward trend in this variable coming to a halt in the final quarter of the year (see Chart 2.6.A). Again, as mentioned above, the reduction in the doubtful assets ratio for the construction and development sector is centred on Group 1 institutions (whose ratio for this sector fell from 38.1% in September 2012 to 23.8% in December 2012), while the ratio of other institutions for this sector increased slightly during the quarter (from 27% to 29% in December 2012).

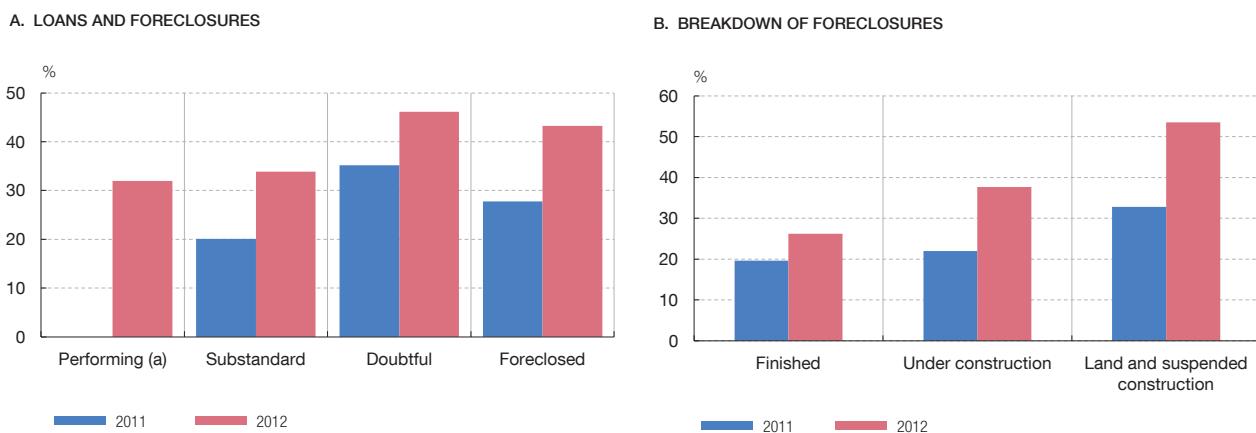
For other sectors the doubtful assets ratio has maintained an upward profile, in line with the increase in doubtful assets and the reduction in credit. Thus, for credit to individuals, the doubtful assets ratio reached 4.7% in December 2012, as against 3.4% a year earlier (see Chart 2.6.A). The increase was most intense in the case of the doubtful assets ratio of credit for purposes other than house purchase, which reached 9.8% in December 2012 (up from 6.8% a year earlier). An increase in the doubtful assets ratio can also be seen in credit for house purchase, from 2.8% in December 2011 to 3.8% in December 2012 (see Chart 2.6.A).

Among non-financial corporations whose main activity is not construction or real-estate development, the doubtful assets ratio rose from 6% in December 2011 to 10% in December 2012 (see Chart 2.6.A).

When these corporations are distinguished on the basis of their size, approximated by the volume of bank debt reported to the CCR, a tendency can be seen for the doubtful assets ratios of the various size classes to rise. The largest corporations (with a volume of debt reported to the CCR of more than €25 million), whose relative weight in terms of credit is 53% (see Chart 2.6.B), have a doubtful assets ratio of 6.4% (see Chart 2.6.C). This ratio has been rising, but it is lower than the ratios for the other size classes, which were relatively similar in December 2012, ranging from 11.3% to 15.1%.

In the present macroeconomic setting characterised by projections for a difficult scenario throughout 2013, the doubtful assets ratio can be expected to continue rising in both non-financial corporations and households. However, the situation is different from that in 2012. First, owing to the rigorous stress tests conducted, which limit the uncertainty over the impact on solvency of potential further deterioration in Spanish bank loans (see Box 2.3). And second, owing to the transfer of real estate assets to Sareb and because the provisions recorded by deposit institutions as a whole as a result of Royal Decree-Laws 2/2012 and 18/2012 have improved confidence in the valuations of real estate assets held on bank balance sheets. Both the asset transfers and the higher provisions are very important in notably reducing the exposure of deposit institutions to the real-estate development sector in the past year, as shown by Chart 2.2. The real estate exposures subject to the aforementioned Royal Decree-Laws which remain on bank balance sheets at December 2012 have much higher provision coverage levels than in 2011, both for loans and for foreclosed assets (see Charts 2.7.A and B).

2012 was characterised by notable uncertainty in the **wholesale funding markets**, which were affected by developments in the euro area sovereign debt crisis. In May and June the uncertainty heightened significantly and financing conditions in the euro area tightened, particularly in Spain and Italy.



SOURCE: Banco de España.

a Not applicable in 2011.

...although in the second half, conditions generally improved...

In 2012 H2 financial market conditions showed a general improvement. Contributing notably to this were the declaration by the ECB president on 26 July that the ECB would do whatever was needed to preserve the euro and the announcement by the ECB Governing Council on 2 August that it would set up a programme of unlimited government debt purchases on the secondary markets (outright monetary transactions or OMT), the technical details of which were made known in September (see Box 2.1 of the 11/2012 FSR). From a more structural standpoint, the progress towards the creation of a single supervisory mechanism in the euro area, a matter to which part of Chapter 3 of this Report is devoted, also helped to alleviate the financial market uncertainty, which, in any event, continued to be high.

## RETROSPECTIVE AND PROSPECTIVE LOOK AT THE BOTTOM-UP STRESS TEST

## BOX 2.3

In the context of the Memorandum of Understanding (MoU) between the Spanish and European authorities in July 2012, an external consultant performed a detailed bottom-up stress test (a stress test with a bank-by-bank breakdown) for the 17 main Spanish banking groups which represent around 90% of the Spanish banking system's assets. The results of this bottom-up stress test determined the recapitalisation needs of approximately ten banks.

This stress test was a rigorous exercise in terms of its resource intensiveness and the exhaustiveness of the information used, as well as in terms of the governance of the process by the European authorities. Prior to the stress test exercise, the four main audit firms in Spain analysed in detail the quality of the credit assets of the banks being stress-tested, including their classification systems for assets and provisions, with particular emphasis on the analysis of refinanced and restructured loans.

The information provided by the external auditors was added to that obtained by the external consultant which interacted directly with the banks and also with the Banco de España (information on 36 million loans and 8 million guarantees). Additionally, the external consultant used the services of six Spanish and foreign appraisal

companies in order to value 8,000 assets and perform slightly more than 1.7 million automatic housing appraisals. The external consultant, independently and on the basis of its models and methodologies applied to this information, obtained the results of the stress test. The whole process was governed by the European authorities (the European Commission, the European Central Bank and the European Banking Authority) with technical assistance from the International Monetary Fund, which constantly monitored how it developed. These organisations participated jointly in the decisions which were taken on the scope of the exercise, the scenarios to be used, the minimum thresholds for capital ratios, etc.

The time period covered by the stress test was from 2012 until 2014. The results were republished on 28 September 2012 and from then onwards a process of recapitalisation and restructuring began for the banks which did not pass the stress tests since it was detected that they had capital needs under the adverse scenario. European funds amounting to €38.83 billion were used in this process in addition to €12 billion from the assumption of losses by holders of preference shares and subordinated debt, plus the capital that certain banks managed to raise by themselves from tapping the capital markets or selling assets. Also, the banks which

received State aid transferred their assets related to the construction and real estate development sector to Sareb, the asset management company created at the end of 2012 to manage and sell those assets over the next 15 years. All the aforementioned items totalled close to €57 billion which was the amount of the capital needs identified under the adverse scenario in the stress test.

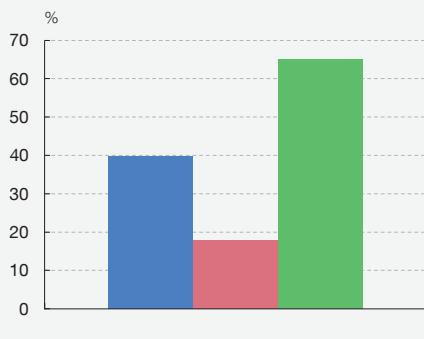
More than six months after the publication of the results of the bottom-up stress test, and given that information is available on actual defaults in 2012, an initial analysis can be made comparing the stress test with actual developments in 2012. Panel 1 shows the probability of default estimated by the external consultant in the six portfolios into which the total loan portfolio of the banks analysed was broken down, for both the baseline and the adverse scenarios. These probabilities of default are compared with the frequency of actual defaults seen in 2012. Firstly, it can be observed that actual defaults in 2012 were lower than the probabilities of default estimated by the consultant both under the baseline and the adverse scenarios in four of the six portfolios: real estate developers, retail mortgages, SMEs and consumer finance. In the other two portfolios, large corporates and public works, the defaults seen are slightly higher than those estimated under the baseline scenario but are still far removed from the estimates for the adverse scenario. Consequently, the results of Panel 1 seem to strengthen the perception that the bottom-up stress test was a demanding exercise not only in terms

of the wealth of information used and the governance process but also in terms of the scenarios and assumptions considered, the models used and the results obtained. Furthermore, the 2012 data show profit before provisions ("pre-provisioning profit" as it was called in the bottom-up exercise) for the business in Spain of slightly more than €20 billion for the banks included in the stress test, which is higher than the estimate made by the external consultant for 2012, under both the baseline and the adverse scenarios (by around €16 billion and €14 billion, respectively).

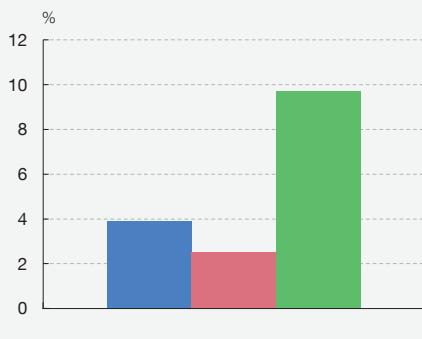
Some of the main macroeconomic variables in the scenarios used in the bottom-up stress test exercise have performed better than expected in 2012 even under the baseline scenario, as is the case of GDP and interest rates, particularly short-term ones. By contrast, the unemployment rate in 2012 is much closer to the adverse scenario than the baseline scenario, as was the case for the fall in house prices, albeit to a lesser degree. Consequently, it is interesting to perform a prospective exercise combining the modelling of the external consultant's probability of default estimates for each loan portfolio and the projections for the Spanish economy published recently by the Banco de España in its March Economic Bulletin. This modelling uses as explanatory variables the main variables of the scenario provided to the consultant (changes in GDP, the unemployment rate, asset prices and interest rates) with a view to subsequently applying the

#### 1 ESTIMATED PROBABILITIES OF DEFAULT AND ACTUAL DEFAULT FREQUENCIES IN 2012

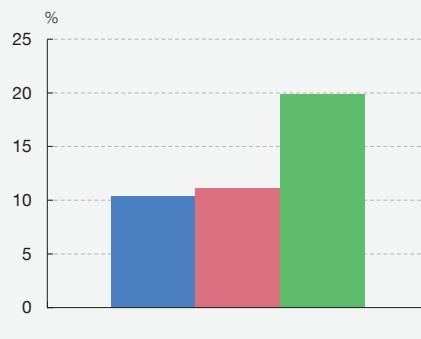
A. REAL ESTATE DEVELOPERS



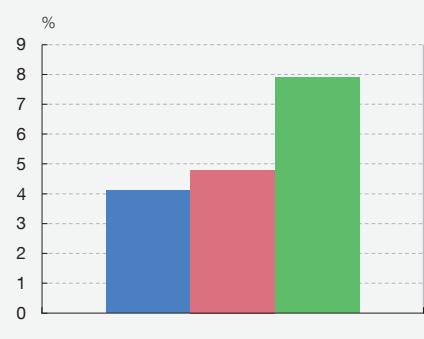
B. RETAIL MORTGAGES



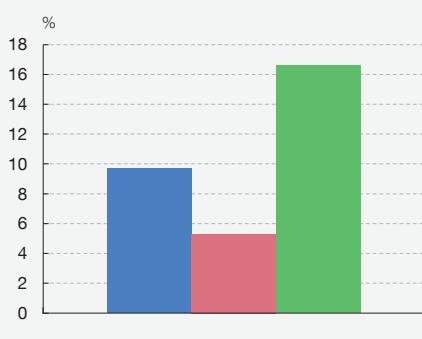
C. PUBLIC WORKS



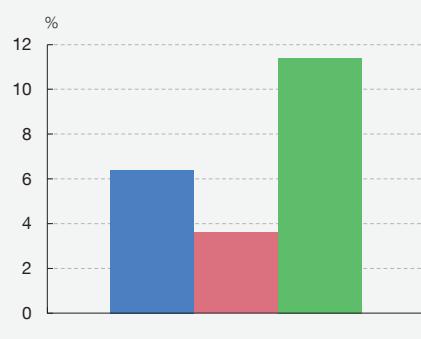
D. LARGE CORPORATES



E. SMEs



F. CONSUMER FINANCE



SOURCE: Banco de España.

model estimated to the central scenario actually considered by the Banco de España. Under this central scenario, GDP in real terms falls 1.5% in 2013 and recovers to 0.6% on a year-on-year basis in 2014 with a projected unemployment rate of 27.1% for 2013 which falls to 26.8% in 2014. The central scenario also incorporates assumptions about short-term interest rates (0.2% in 2013 and 0.4% in 2014). Panel 2 shows the results of this prospective exercise, year-by-year and more usefully, cumulatively. In all the portfolios, except for real estate developers, the projections based on the Banco de España's central scenario for this year and next result in cumulative probabilities of default which are higher than those estimated by the consultant under its baseline scenario but far removed from those under the adverse scenario. This latter matter is so because some of the variables that most impact the calculation of probabilities of default (GDP and interest rates, in particular short rates) performed better in 2012 than was considered in the macroeconomic scenarios used at the time. These results should be viewed with caution because the modelling itself is undertaken using a very small sample of observations with a high number of variables and, consequently, the degrees of freedom are not very wide. In any event, they constitute a sound form of summarising

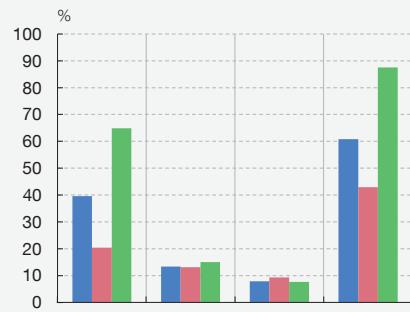
the changes in direction of macroeconomic variables which are not always homogeneous.

Finally, the forecasts existing as of today for 2013 year-end in relation to the core tier 1 ratio (which in accordance with the MoU should be above 9% for all Spanish banks, whether or not they have been recapitalised with public funds) are positive, in the sense that both at the level of the banks as a whole and at the level of all the groups in the MoU the above-mentioned threshold is exceeded by at least 1 pp (minimum ratios estimated at 10% of core tier 1). Specifically, using the projections of the banks' business plans, at the end of 2013 the capital ratio will stand at 10.15% for Group 0 and Group 3, at 11.25% for Group 1 and at 10.25% for Group 2.

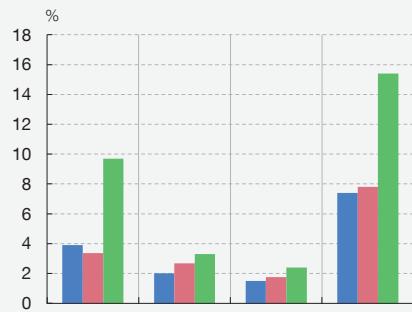
The two previous retrospective and prospective exercises, subject to the above-mentioned caveat, underline the value of the stress tests conducted on the Spanish banking sector in the second half of 2012. The Banco de España will include the stress tests, internally and on a regular basis, in its supervisory arsenal so that it can monitor closely and on an individual basis, the future situation of each bank so as to, if necessary, take the corrective measures deemed appropriate in each case.

## 2 ESTIMATED PROBABILITIES OF DEFAULT 2012-2014

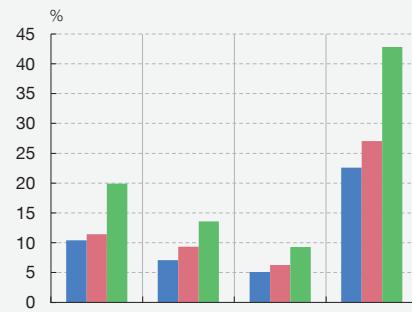
A. REAL ESTATE DEVELOPERS



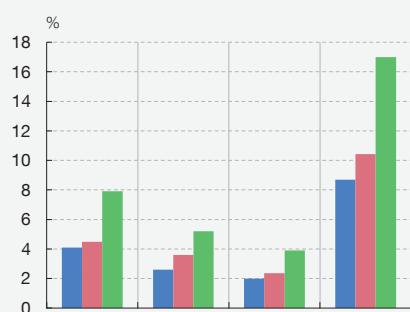
B. RETAIL MORTGAGES



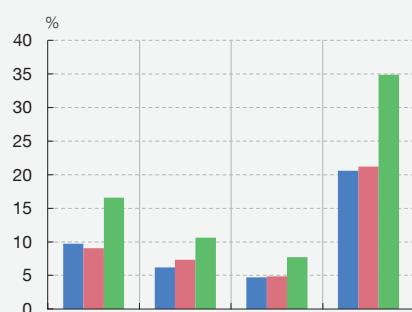
C. PUBLIC WORKS



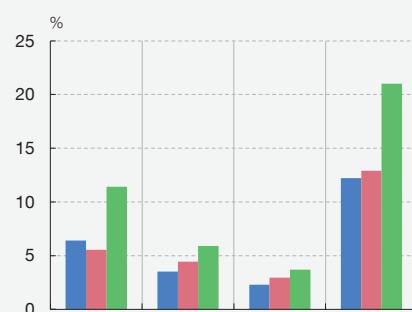
D. LARGE CORPORATES



E. SMEs



F. CONSUMER FINANCE



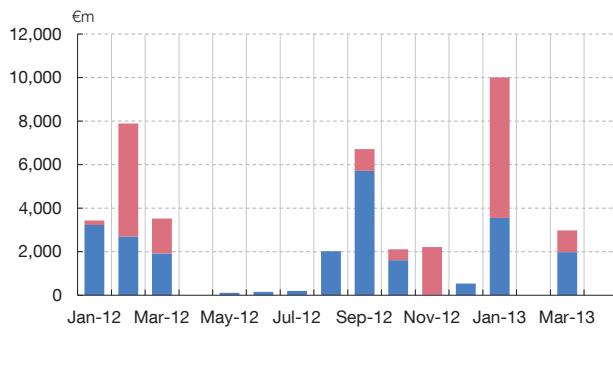
SOURCE: Banco de España.

a Estimation by BdE based on the external consultant's probabilities of default.

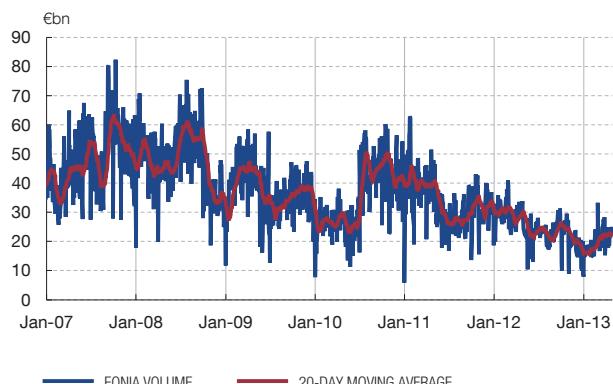
## WHOLESALE FUNDING

CHART 2.8

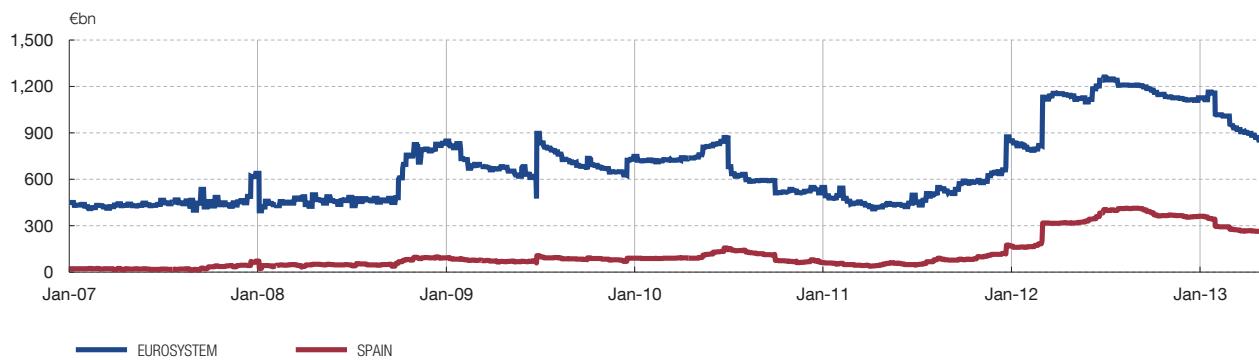
A. MAIN ISSUES OF SPANISH INSTITUTIONS IN MEDIUM- AND LONG-TERM WHOLESALE MARKETS (a)  
Latest data: 26 April 2013



B. EONIA TRADING VOLUME  
Latest data: 26 April 2013



C. OUTSTANDING AMOUNT PROVIDED THROUGH EUROSYSTEM TENDERS.  
Latest data: 26 April 2013



SOURCES: Bloomberg, Dealogic and Banco de España.

a Senior debt and covered bond issues are included. Retained issues are not included.

...and this situation has continued in the opening months of 2013, presenting opportunities to Spanish banks to issue securities, which they have duly seized

In the opening months of 2013, financial market conditions continued to show a certain respite within a situation still beset by notable uncertainty, and opportunities arose which Spanish banks took advantage of to issue debt securities on the wholesale markets, as has been their custom throughout these years of financial crisis. From the start of the year to date, and particularly in January, these opportunities have been grasped not only by the larger banks with an international presence, but also by those more focused on Spain with a smaller relative size. From January to the end of April, Spanish institutions issued some €5.5 billion of senior debt (see Chart 2.8.A), thereby lengthening the average maturity of the issues made in 2012 from 2.5 years to 3.6 years. In the same period mortgage covered bonds were also issued which – excluding those issued and retained by banks – amounted to approximately €7.5 billion, the average maturity of these securities rising from 4 years in 2012 to 5.2 years in the opening months of 2013.

The situation, however, continues to be subject to high uncertainty, with scant changes in the interbank markets...

In any event, as mentioned above, the situation in the financial markets remains subject to a high level of uncertainty. The euro area interbank markets have not changed significantly. Their activity has remained weak, mainly as a result of the excess liquidity resulting from Eurosystem longer-term refinancing operations. Thus, trading volumes have remained at significantly lower levels than in previous years. Chart 2.8.B, which plots the EONIA trading volumes, shows how, after following the downward path

...which was reflected in continuing recourse to Eurosystem funds, albeit with a decreasing trend from summer 2012

characterising 2012 H1, trading rose slightly in September, but then fell again to very low levels between December 2012 and January 2013, even below those of summer 2012. From the beginning of 2013, there again seems to be a certain, albeit relatively moderate, rise. The Spanish interbank market has, for its part, shown similar movements to those described for the EONIA.

Deposits from households and non-financial corporations began to fall in mid-2011 due, firstly, to the macroeconomic situation...

...and, secondly, to a rebalancing of the saving portfolio of these agents towards bank securities such as promissory notes

Since mid-2012, deposits have performed more favourably

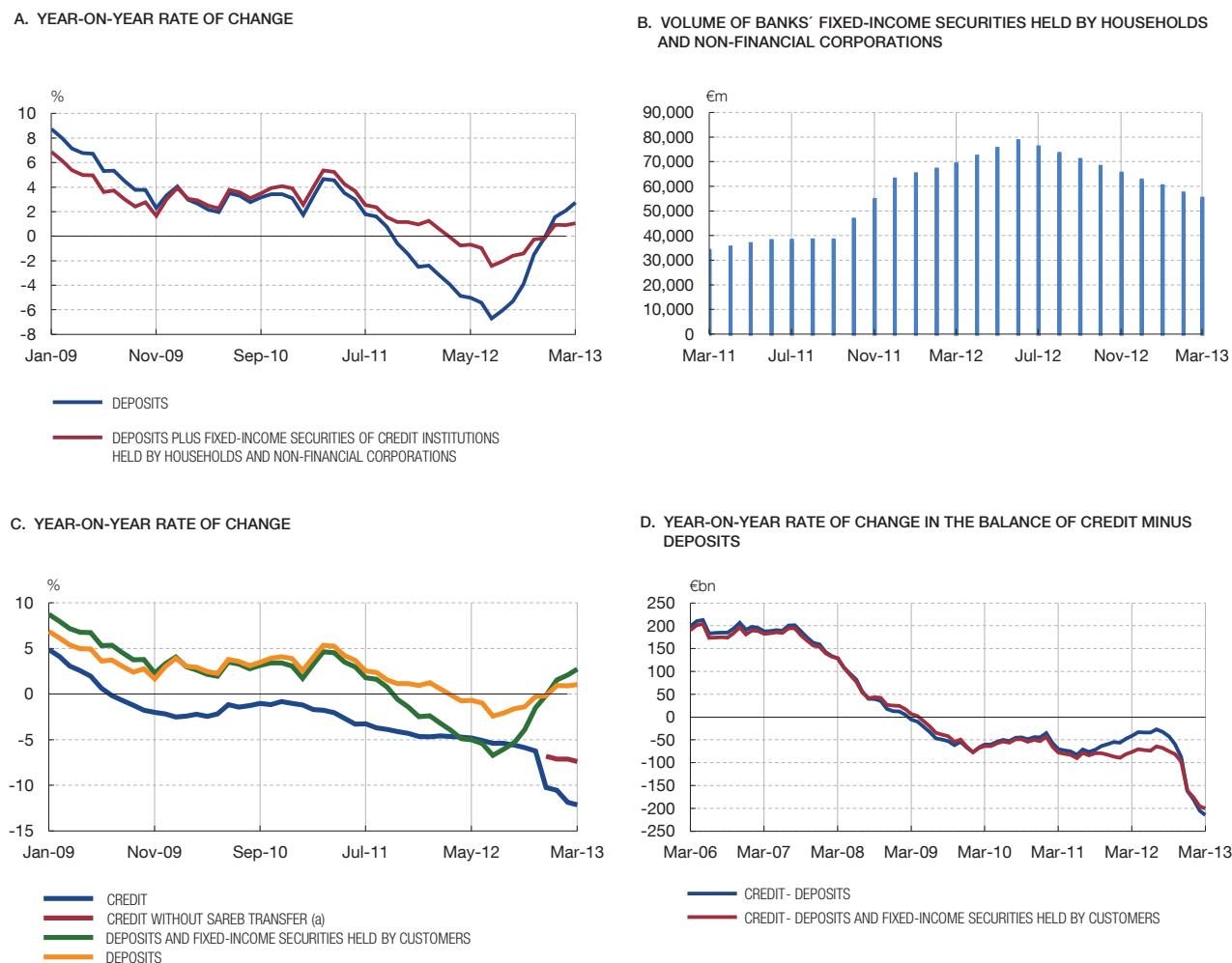
As a reflection of this lack of activity on the interbank markets, European credit institutions continued to resort substantially to Eurosystem funds. That said, they have clearly tended to reduce their recourse to these funds since summer 2012, when the Governing Council of the European Central Bank reduced to zero the remuneration of the deposit facility and, more importantly, announced its intention to intervene in the secondary markets for euro area sovereign debt (OMT programme). This announcement noticeably boosted the ability of European banks to raise funds on the primary markets and was particularly important for Spanish banks, which were among those most strongly affected by the sovereign debt crisis.

This development allowed European banks not only to progressively lower their purchases in new tenders, but also to begin repaying in 2013 a portion of the funds received in the two 3-year tenders allotted in late 2011 and early 2012. Chart 2.8.C plots the outstanding balance of the ECB tenders for the total Eurosystem and for banks resident in Spain. It shows how, from the end of October 2012 to the end of April 2013, banks resident in Spain reduced their gross recourse to the Eurosystem by €104 billion (-28%), while the outstanding balance in the total Eurosystem decreased by €289 billion (-25%). Consequently, the share of loans to Spanish banks in the total Eurosystem decreased in this period, leaving the percentage allotted to Spanish-resident banks at an average of 29% in March 2013, compared with 32% in October 2012.

**Deposits from households and non-financial corporations** constitute retail funding of deposit institutions. From mid-2011 the retail deposits received by deposit institutions embarked on a progressive decline, reaching negative year-on-year rates of change of around 6% at mid-2012 (see Chart 2.9.A). This downward trend is due, firstly, to the lower capacity of households and non-financial corporations to accumulate financial assets in a setting of deleverage and weak income growth.

Secondly, there was a certain rebalancing of the saving portfolio of non-financial corporations and households away from deposits and towards bank securities (promissory notes). The regulatory changes in 2011, intended to adjust the contributions to the Deposit Guarantee Fund, reduced the commercial appeal of deposits compared with other instruments, such as securities, not subject to these contributions. This effect, as seen in Chart 2.9.B, tended to weaken from August 2012, when these contributions were again changed to avoid such incentives in banks' marketing of their saving products. Discounting this second effect, i.e. the rebalancing of customer portfolios from deposits towards bank securities, which in fact entails no loss of retail funds for banks, the rates of change at mid-2012 were negative and around 2%, far from the aforementioned year-on-year decrease of 6% in deposits from households and non-financial corporations (see Chart 2.9.A).

Since mid-2012, the performance of retail deposits has been increasingly more favourable (see Chart 2.9.A). Also, the difference between the growth rate of retail deposits and that of those same deposits including bank promissory notes has decreased. This shows that the legislative changes of August 2012 managed to eliminate the incentives for marketing



SOURCES: Bloomberg, Dealogic and Banco de España.

a. In December 2012 Group 1 assets were transferred to Sareb, while in February 2013 Group 2 assets were transferred to Sareb.

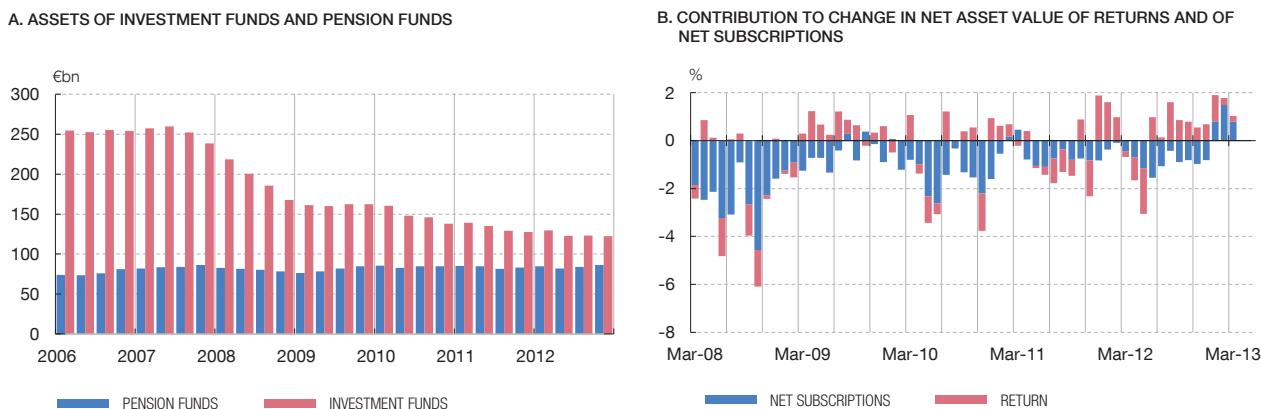
promissory notes compared with deposits. The latest data, relating to March 2013, show a positive year-on-year rate of change of deposits from households and non-financial corporations of 2.7%.

The behaviour of loans and deposits has reduced the loan-deposit gap in the last two years

The behaviour of lending to and deposits from households and non-financial corporations in the last two years (see Chart 2.9.C) explains the progressive decrease in the difference between loans and deposits (see Chart 2.9.D), which contributes to narrowing the gap between credit to the resident private sector and retail deposits, which in turn is consistent with the progressive deleveraging of the banking sector. The transfer of assets to Sareb in December 2012 is apparent in the increased pace of deleveraging in that month, although it does not alter the overall trend of progressive narrowing.

The net assets of investment and pension funds scarcely changed in 2012

In 2012 H2 the net assets of investment funds barely changed and held at the level reached in June 2012, thus halting the downward trend characterising their behaviour since the onset of the crisis (see Chart 2.10.A). This behaviour is compatible with the negative net subscriptions recorded by investment funds in every month of 2012, continuing a trend initiated in 2011 Q2, and with the simultaneous posting of positive profit figures in all



SOURCE: INVERCO.

months from June onwards, which offset the negative subscription rates and stabilised the net assets of investment funds (see Chart 2.10.B). This trend has reversed slightly in the opening months of 2013. The net assets of pension funds increased in the last two quarters of 2012; there had not been a rise in their net assets for two quarters running since the beginning of 2011 (see Chart 2.10.A).

## 2.2 Profitability

Deposit institutions posted substantial losses in 2012...

Deposit institutions recorded a loss before tax of €62,278 million (m) in 2012, which decreased to €52,889 m after tax. This was basically due to the impact of the loss per books of the institutions in Group 1 (€47,901 m) and Group 2 (€11,334 m), which generate tax losses and which, under the tax regulations in force for the 2012 tax year, may be offset against the taxable income of future tax periods for the next 18 years.

The consolidated loss attributable to the controlling company was €–43,724 m between January and December 2012 (see Table 2.2). This contrasts with the profit of €2,734 m in the previous year. This loss put the return on assets (ROA) at –1.19%, compared with 0.08% in 2011. The return on equity (ROE) was –21% in 2012, compared with 1.3% a year earlier.

... although a significant part related to Group 1 institutions. Groups 0 and 3 taken together recorded a profit

A significant portion of this loss of €43,724 m (see Chart 2.11.A) related to Group 1 institutions (BFA, NCG Banco, Catalunya Banc and Banco de Valencia), while the rest of the loss was concentrated in Group 2 institutions (BMN, Caja3, CEISS and Liberbank). The Group 0 and 3 institutions, whose overall weight in the average total assets of the system is 74.3%, posted a profit in December 2012, in which the most notable features were the profits of the large banking groups with a strong international presence (€3,860 m) and the loss of €2,460 m of a Group 3 institution.

The adverse trend in results is largely explained by the sharp increase in impairment provisions in 2012

Most of the loss of the total system are explained by the sharp increase in provisions recorded by institutions in 2012 largely to meet the additional requirements set in Royal Decree-Laws 2/2012 and 18/2012 promulgated in the first half of 2012 (see Chart 2.14).

Net interest income performed positively in 2012...

Net interest income performed positively in 2012, growing by 7.2% year-on-year.<sup>7</sup> This increase resulted from a decrease in financial costs (–8.1%) outweighing that in financial

<sup>7</sup> Mergers and integrations between institutions in 2012 changed the corporate landscape from 2011 to 2012. This affected the comparability of these two dates and, in particular, reduced, albeit not very significantly, the percentage changes in income statement items. Accordingly, the growth of net interest income after adjusting for this effect would be slightly higher.

**INCOME STATEMENT**  
Deposit institutions

TABLE 2.2

|   | Dec-12  | Dec-11                    | Dec-12 |
|---|---------|---------------------------|--------|
|   | €m      | % Change<br>Dec-12/Dec-11 | % ATA  |
| Financial revenue   | 135,619 | -1.0                      | 3.78   |
| Financial costs   | 67,823  | -8.1                      | 2.03   |
| Net interest income   | 67,796  | 7.2                       | 1.74   |
| Return on capital instruments   | 1,531   | -28.9                     | 0.06   |
| Share of profit or loss of entities accounted for using the equity method | 3,081   | -14.8                     | 0.10   |
| Net commissions   | 23,546  | -0.1                      | 0.65   |
| Gains and losses on financial assets and liabilities                      | 8,188   | 22.8                      | 0.18   |
| Other operating income (net)  | -3,168  | —                         | -0.03  |
| Gross income  | 100,973 | 2.9                       | 2.70   |
| Operating expenses  | 50,076  | -0.7                      | 1.39   |
| Net operating income  | 50,898  | 6.8                       | 1.31   |
| Asset impairment losses (specific and general provisions)                 | 86,564  | 173.6                     | 0.87   |
| Provisioning expense (net)  | 7,941   | 91.6                      | 0.11   |
| Operating profit  | -43,608 | —                         | 0.33   |
| Asset impairment losses (assets other than loans and receivables)         | 18,360  | 36.8                      | 0.37   |
| Income from disposals (net)   | -310    | —                         | 0.10   |
| Profit before tax   | -62,278 | —                         | 0.06   |
| Net income  | -52,889 | —                         | 0.08   |
| MEMORANDUM ITEM   |         |                           |        |
| Income attributable to the controlling entity                             | -43,724 | —                         | 0.08   |
|   |         |                           | -1.19  |

SOURCE: Banco de España.

revenue (-1%). Net interest income was also up in terms of average total assets, rising from 1.74% of ATA in December 2011 to 1.85% in December 2012.

...due to the behaviour of average interest rates on assets and liabilities and despite the contraction in activity

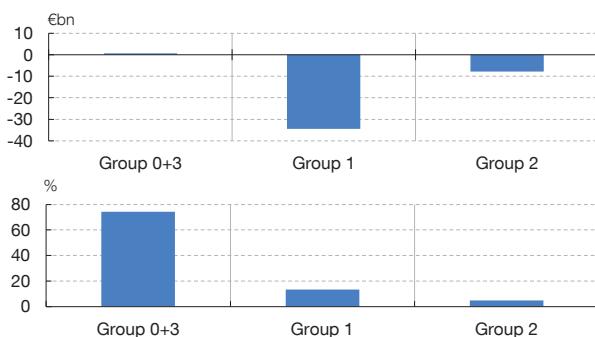
Focusing our analysis on business in Spain, the pick-up in net interest income in 2012 arose mainly from the changes in the average interest rates of financial revenues and costs (i.e. from a price effect), since the behaviour of activity (quantity effect) was slightly negative (see Chart 2.11.B), in line with the behaviour of credit analysed previously in this Report. The change in the spread between asset and liability interest rates more than offset the contraction in activity in 2012.

Distinguishing between institutions, the net interest margin grew both for Group 1 and 2 institutions and for the rest, although it did so more sharply for the Group 1 and 2 institutions taken as a whole (18.6% year-on-year in business in Spain) than for the rest (9.4% year-on-year between December 2012 and December 2011). In both sets of institutions, in line with the behaviour of the total, the price effect (change in asset and liability spreads) prevailed over the quantity effect (behaviour of activity), although differing behaviours were apparent in one and the other set of institutions (see Charts 2.11.C and D).

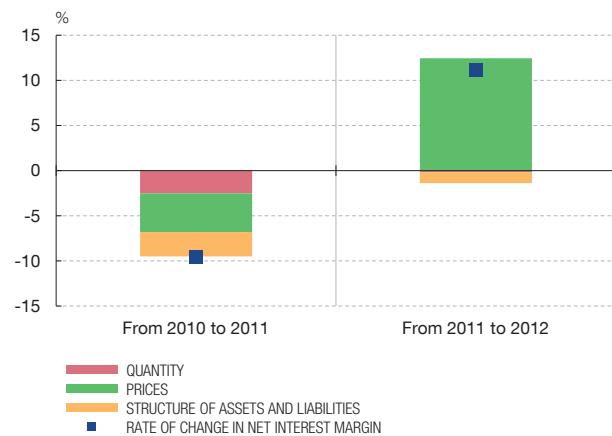
The Group 1 and 2 institutions changed the composition of their balance sheets, ...

In the institutions belonging to Groups 1 and 2, the spread between the average customer asset and liability rates (which basically reflects lending and deposit funding activities) narrowed by 0.14 pp in 2012, while the spread between the average interest rates for the

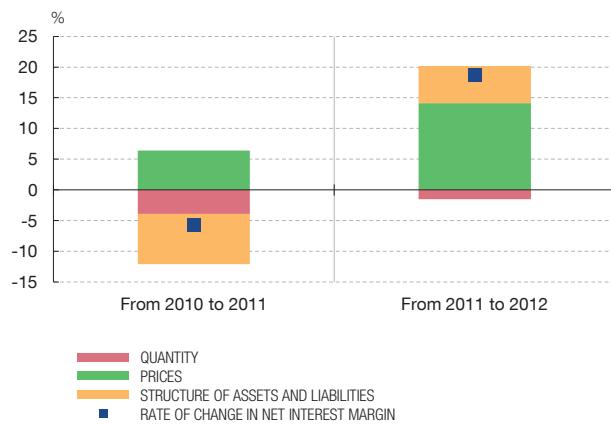
A. INCOME ATTRIBUTABLE TO THE CONTROLLING ENTITY BY GROUPS  
(upper panel) AND WEIGHT OF GROUP ATA IN TOTAL (lower panel)



B. PERCENTAGE OF THE CHANGE IN NET INTEREST INCOME EXPLAINED BY EACH FACTOR  
Total deposit institutions



C. PERCENTAGE OF THE CHANGE IN NET INTEREST INCOME EXPLAINED BY EACH FACTOR  
Group 1 and 2 Institutions



D. PERCENTAGE OF THE CHANGE IN NET INTEREST INCOME EXPLAINED BY EACH FACTOR  
Total deposit institutions excluding Group 1 and 2 institutions



SOURCE: Banco de España.

...with more funding from central banks and more investment in Spanish public debt, which widened the spread

The changes in balance sheet composition were less significant in other institutions

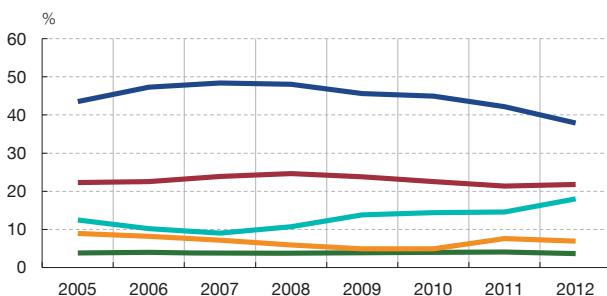
Net fees and commissions decreased slightly...

balance sheet as a whole widened by 0.18 pp. That is to say, these institutions changed the composition of their balance sheet (see Charts 2.12.A and B), raising the proportion of their funding from the central bank and investing a larger share of their assets in fixed-income securities, including Spanish public debt and other government-guaranteed bonds. This resulted in the aforementioned widening of the spread between asset and liability interest rates.

By contrast, at other institutions the spread between average customer asset and liability rates and that for the balance sheet total widened by a similar amount. Although these institutions increased their funding from the central bank and raised their holdings of fixed-income securities, these changes were less significant (see Charts 2.12.C and D).

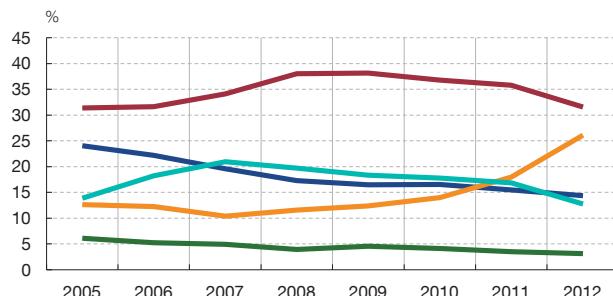
**Net fees and commissions** at consolidated level decreased slightly by 0.1% year-on-year in December 2012, although in terms of ATA they did not change significantly (-0.1 pp). The variation in fees and commissions was marked by the growth of those derived from collection and payment services and by the decrease in those arising from securities services and from the marketing of non-bank financial products. The Group 1 and 2

A. GROUP 1 AND 2 INSTITUTIONS.  
AVERAGE FINANCIAL ASSETS



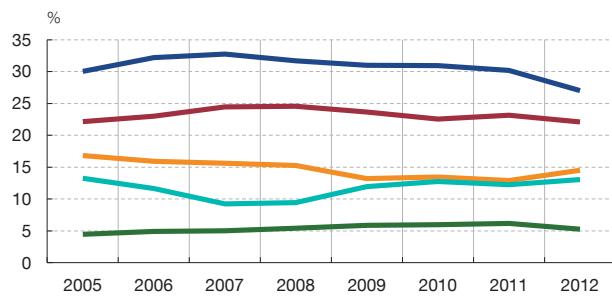
MORTGAGE LOANS TO THE RESIDENT PRIVATE SECTOR  
NON-MORTGAGE LOANS TO THE RESIDENT PRIVATE SECTOR  
OTHER CUSTOMER CREDIT  
CENTRAL BANKS AND CIs  
DEBT SECURITIES

B. GROUP 1 AND 2 INSTITUTIONS.  
AVERAGE FINANCIAL LIABILITIES



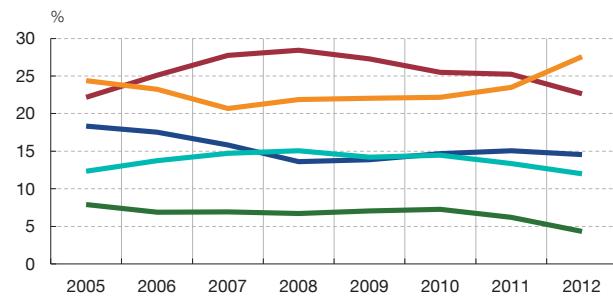
RESIDENT PRIVATE SECTOR DEMAND DEPOSITS  
RESIDENT PRIVATE SECTOR TIME DEPOSITS AND REPOS  
OTHER CUSTOMER DEPOSITS  
CENTRAL BANKS AND CIs  
MARKETABLE SECURITIES AND SUBORDINATED DEBT

C. DEPOSIT INSTITUTIONS EXCLUDING GROUPS 1 AND 2.  
AVERAGE FINANCIAL ASSETS



MORTGAGE LOANS TO THE RESIDENT PRIVATE SECTOR  
NON-MORTGAGE LOANS TO THE RESIDENT PRIVATE SECTOR  
OTHER CUSTOMER CREDIT  
CENTRAL BANKS AND CIs  
DEBT SECURITIES

D. DEPOSIT INSTITUTIONS EXCLUDING GROUPS 1 AND 2.  
AVERAGE FINANCIAL LIABILITIES



RESIDENT PRIVATE SECTOR DEMAND DEPOSITS  
RESIDENT PRIVATE SECTOR TIME DEPOSITS AND REPOS  
OTHER CUSTOMER DEPOSITS  
CENTRAL BANKS AND CIs  
MARKETABLE SECURITIES AND SUBORDINATED DEBT

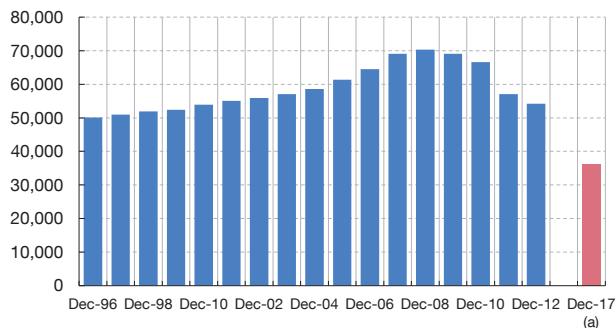
SOURCE: Banco de España.

institutions showed a significant decrease in net fees and commissions received (-6.8%) due to the lower activity of these institutions. Fees and commissions at other institutions remained unchanged in the past year.

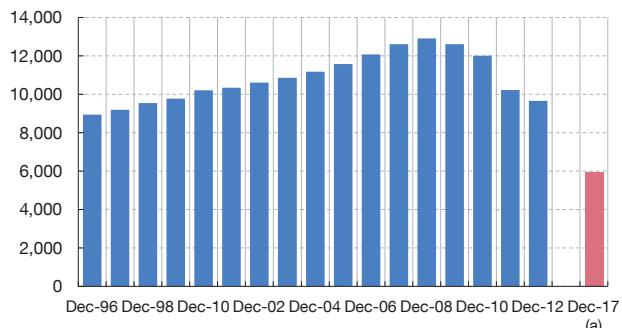
... while operating expenses decreased, particularly in business in Spain

Operating expenses decreased by 0.7% year-on-year in 2012, this decline being concentrated in business in Spain (-5.8%). Particularly significant was the decline in personnel expenses (-2.4%), made possible in part by the processes of integration between institutions in 2012, which gave rise, in business in Spain, to significant falls in the number of staff (see Chart 2.13.A) and number of offices (see Chart 2.13.B). These falls were more marked in Group 1 and 2 institutions, where the number of offices dropped to around its 1998 level and the number of staff to that of 2000. For these (Group 1 and 2) institutions, the decrease in operating expenses was also more marked (-6% year-on-year compared with -0.2% at other institutions). Under the restructuring plans approved, the decrease in staff and offices has to continue (see Charts 2.13.A and B) until the objectives set in them are achieved, since this is a condition for recapitalisation with public funds. In terms of ATA, operating expenses also decreased slightly in deposit institutions as a whole (-0.03 pp), with very similar declines in Group 1 and 2 institutions and in the rest, although their weight in ATA continues to be greater in the institutions not belonging to Groups 1 and 2.

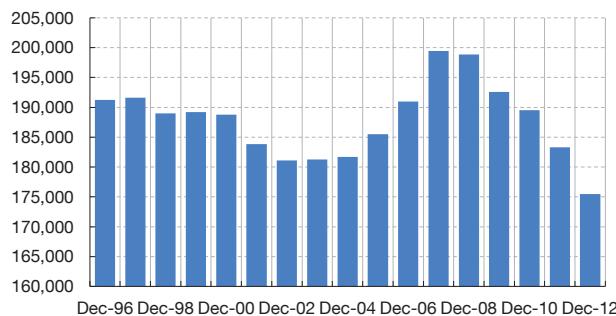
A. NUMBER OF EMPLOYEES  
Group 1 and 2 institutions



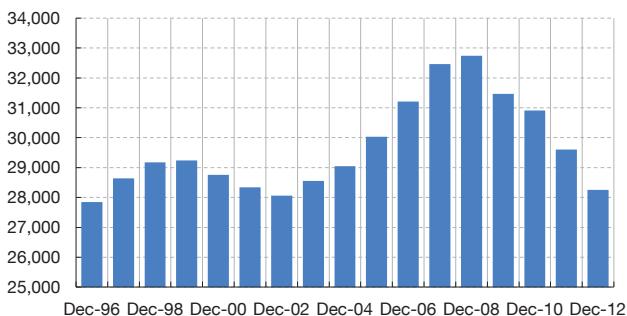
B. NUMBER OF OFFICES  
Group 1 and 2 institutions



C. NUMBER OF EMPLOYEES  
Total institutions excluding Groups 1 and 2



D. NUMBER OF OFFICES  
Total institutions excluding Groups 1 and 2



SOURCE: Banco de España.

a Estimated number of employees/offices according to the restructuring plans of Groups 1 and 2 approved by the European Commission.

Impairment losses grew sharply in 2012, largely due to the impact of Royal Decree-Laws 2/2012 and 18/2012...

...the most significant increase being in Group 1 and 2 institutions

Impairment losses on other assets also grew sharply

**Impairment losses**, which reflect specific and general provisions, grew substantially in 2012 (173.6%) at consolidated level. In terms of ATA they were also significantly higher, rising from 0.87% of ATA in December 2011 to 2.3% a year later. The compliance with Royal Decree-Law 2/2012 of 3 February 2012 on balance sheet clean-up of the financial sector and with Royal Decree-Law 18/2012 of 11 May 2012 on write-down and sale of financial sector real estate assets was the main reason for the increase in impairment provisions. Although in the first half institutions recorded early to a greater or lesser extent the provisions to be set aside in 2012, in the fourth quarter of the year they had to record the bulk of the additional provisions derived from the aforementioned royal decree-laws. However, developments in the macroeconomic environment further pushed up provisioning by institutions, due to the rise in doubtful assets.

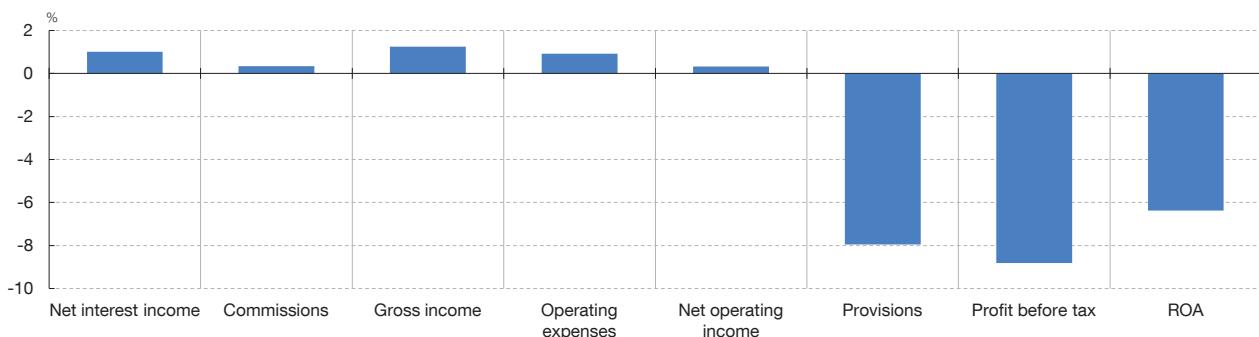
The most significant growth in impairment losses was concentrated in Group 1 and 2 institutions, where, in terms of ATA, specific and general provisions increased from 0.9% in December 2011 to 6.2% in December 2012. In the other institutions as a whole, their weight in ATA was 1.4% in December 2012, compared with 0.9% in the previous year.

Impairment losses on other assets (assets other than loans and receivables) show a similar behaviour, rising sharply during 2012 compared with the previous year (36.8%) and significantly stepping up their weight in ATA (0.50% in December 2012 against 0.37% a year earlier). The Group 1 and 2 institutions accounted for a large part of the total increase, in terms of both year-on-year growth and weight in ATA.

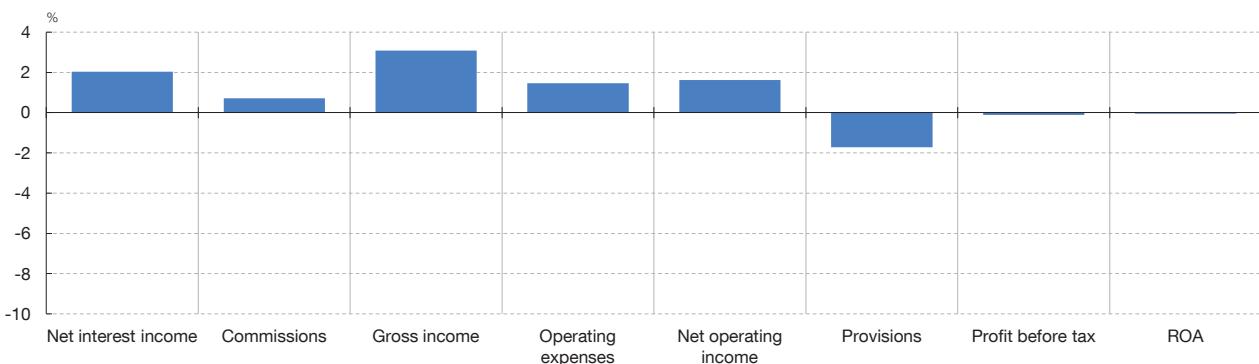
**STRUCTURE OF CONSOLIDATED PROFIT & LOSS ACCOUNT AS % OF ATA  
Deposit institutions**

**CHART 2.14**

**A. GROUP 1 AND 2 INSTITUTIONS**



**B. DEPOSIT INSTITUTIONS EXCLUDING GROUPS 1 AND 2**

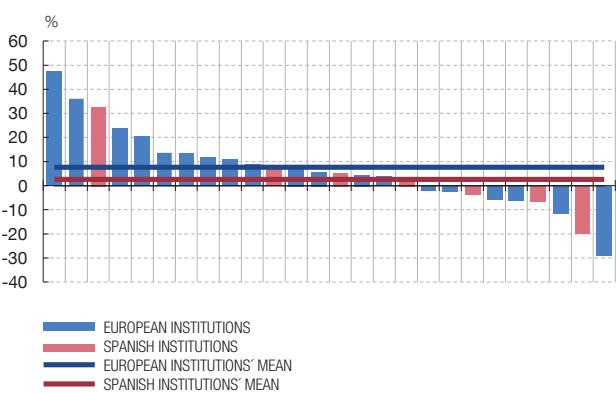


SOURCE: Banco de España.

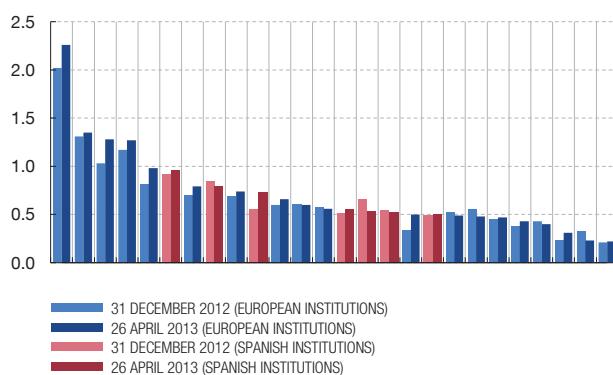
**MARKET INFORMATION**  
**International comparison (a)**

**CHART 2.15**

**A. STOCK MARKET CHANGE BETWEEN 31 DECEMBER 2012 AND 26 APRIL 2013 (b)**



**B. PRICE-TO-BOOK VALUE RATIO. BIGGEST EUROPEAN INSTITUTIONS (c)**



Additional pressure on the income statement is expected in 2013, due to lower activity and higher doubtful loans

In short, the income statement position of Spanish deposit institutions will come under pressure in the next few quarters because the macroeconomic setting in Spain suggests that the volume of lending will decline and doubtful loans will move upward, which will have a negative impact on net interest income and an upward effect on provisioning

requirements in 2013. However, it seems that these provisions will be significantly lower than those required in 2012 under Royal Decree-Laws 2/2012 and 18/2012. Accordingly, the room for manoeuvre available to institutions for addressing the challenges posed by their income statements in 2013 is rather limited, leading them to consider cost containment policies. Otherwise, the consequent further deterioration in margins and results might erode their capital.

Stock market prices have performed positively so far in 2013

In 2013 so far, the main European private banks have performed positively on the stock market. The rise in stock market prices of Spanish banks has been in the middle of the field with respect to their peers, although exhibiting a wide dispersion (see Chart 2.15.A). As a result of this favourable performance, price-to-book value of banks continues to improve, although it still stands below unity for most banks. The main Spanish private banks are in an intermediate position with respect to their European peers regarding their price-to-book value (see Chart 2.15.B).

## 2.3 Solvency

The solvency ratio of Spanish institutions excluding Group 1 and 2 institutions was 12.1% in December 2012...

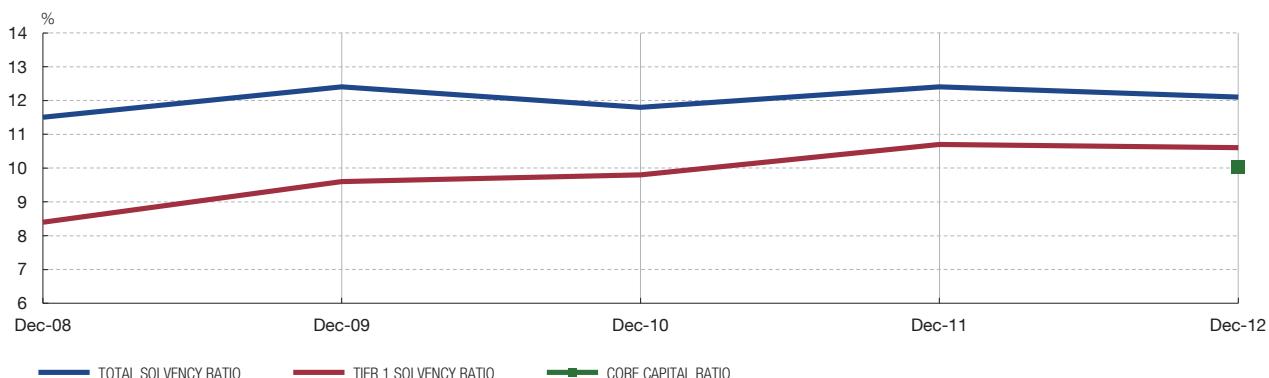
The solvency ratio of deposit institutions as a whole in 2012 was determined by the restructuring and recapitalisation processes implemented by them throughout 2012, which for Group 2 institutions concluded in February 2013. For this reason, the solvency of the banking sector is analysed by examining the total sector except for Group 1 and 2 institutions, which are analysed in detail in Box 2.4.

The solvency ratio of Spanish deposit institutions excluding Group 1 and 2 institutions was 12.1% in December 2012, 33 basis points (bp) lower than in December 2011. The tier 1 ratio remained practically unchanged throughout the past year, edging down from 10.7% in December 2011 to 10.6% in December 2012 (see Chart 2.16).

Royal Decree-Law 2/2011 of 18 February 2011 on the strengthening of the Spanish financial system established the capital principal requirements at 8% as the standard level and at 10% for institutions which find it difficult to access the markets and so resort to considerable wholesale funding. In compliance with the MoU, RDL 24/2012, and subsequently Law 9/2012 which repealed it, replaced these capital requirements by a single requirement of 9%. The definition of capital principal was changed to make it the same as that of core capital established by the EBA in its Recommendation 2011/1. Law 9/2012 stipulates that institutions must comply with these new requirements from 1 January 2013.

**SOLVENCY**  
Deposit institutions excluding Group 1 and 2 institutions

CHART 2.16



SOURCE: Banco de España.

In late September 2012 the final results of the banking sector's capital needs were published, following the external assessment by independent consultants. These experts set final capital needs at €27.3 billion and €56.9 billion under the baseline and adverse scenarios, respectively. As a logical conclusion of these results, banks with additional capital needs were required to submit recapitalisation plans. Panel A depicts the capital needs resulting from this exercise.

These plans encompassed a heterogeneous set of measures, with the main ones summarised below. The transfer of impaired assets to the Asset Management Company for Assets Arising from Bank Restructuring, Sareb, plays a key role in these plans. The attendant amounts are broken down in Chart 2.1.A of this report.

#### Assumption of losses by shareholders and hybrid instrument-holders (burden-sharing exercise)

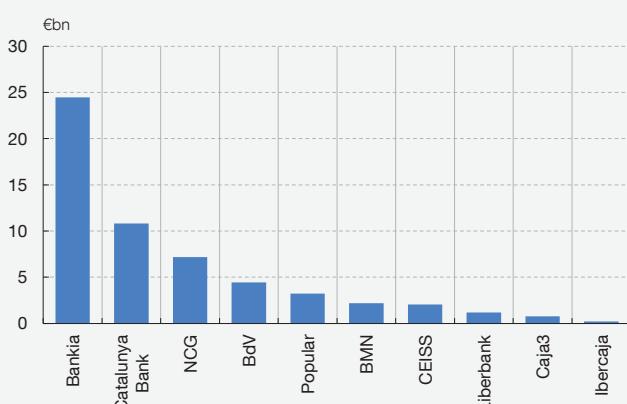
As a result of the new legal framework arising from the MoU on financial sector policy conditionality, banks with additional capital needs and without the capacity to raise private capital have had to or must now engage in a prior exercise involving the assumption of losses by shareholders and hybrid capital instrument-holders (preference shares and subordinated debt).

#### Raising capital through private channels

An alternative has been recapitalisation through private channels, which has proven particularly significant in the case of the Group 3 banks (Banco Popular and Ibercaja), which have resorted to this channel so as to avoid the entry of public capital into their shareholder structure:

- Banco Popular raised €2.5 billion in a capital increase on the market which, combined with the realisation of various capital gains, has allowed it to resolve the additional capital needs detected in the Oliver Wyman stress test.

#### A. ADDITIONAL CAPITAL NEEDS



SOURCE: Banco de España.

- Ibercaja has covered its capital needs through the realisation of capital gains.

#### Public support from the FROB

Notwithstanding the importance of the foregoing measures, a significant group of banks have had to request public aid from the FROB, in which connection the latter received funds from the European Stability Mechanism (ESM). This aid was instrumented as follows:

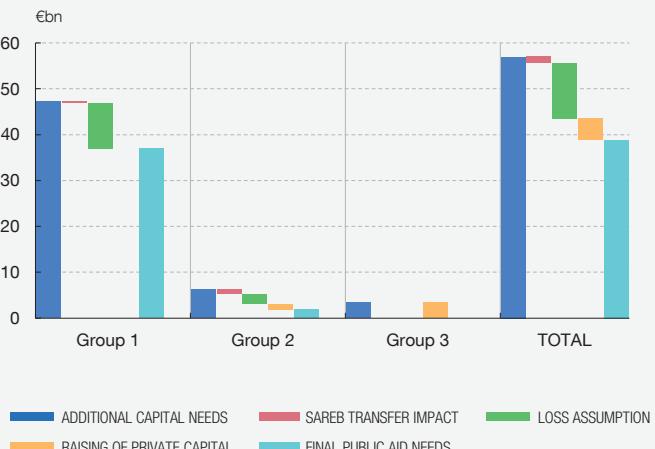
- In a group of banks belonging both to Group 1 and Group 2 (Banco de Valencia, Catalunya Banc, NCG Banco, Bankia-BFA, BMN and CEISS), the aid was in the form of capital amounting to €38.3 billion, with the FROB taking a majority stake in these banks.
- At two banks (Caja3 and Liberbank) the aid took the form of contingent convertible bonds amounting to €531 billion. Both banks belonged to Group 2.

Of the banks in which the FROB has taken a controlling stake, the sale of Banco de Valencia has been concluded while CEISS is awaiting the finalisation of its integration process with Unicaja. As regards Catalunya Banc and NCG Banco, the Spanish authorities have undertaken to privatise them within five years, or otherwise to wind them down. In the case of BMN, the commitment entails a market launch of the company before end-2017. Finally, BFA-Bankia, given its systemic nature, is not subject to this sale-to-third-parties requirement.

At the time of this report going to press, the foregoing measures are being gradually implemented. Panel B reflects the impact of each measure on the coverage of additional capital needs (€ billion), pending the final results of the burden-sharing exercises.

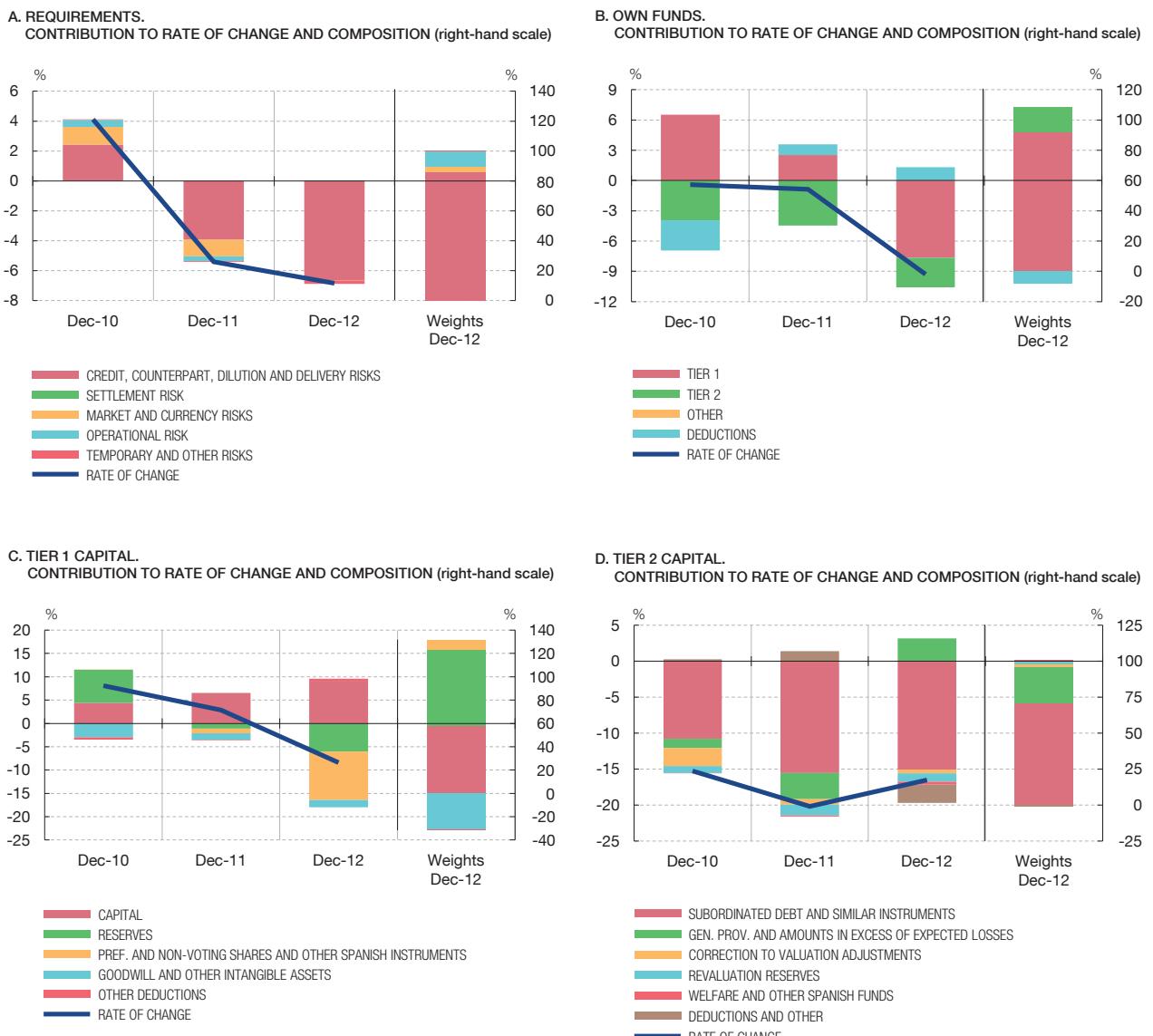
Once the burden-sharing exercises are concluded, the core tier 1 ratios (with respect to December 2012) for the Group 1 banks will reach 10.5%, those for the Group 2 banks will stand at 9% and those for Group 3, at 10.1%.

#### B. IMPACT OF EACH MEASURE ON COMPLIANCE WITH ADDITIONAL CAPITAL NEEDS



**CAPITAL REQUIREMENTS AND OWN FUNDS**  
Deposit institutions excluding Group 1 and 2 institutions

CHART 2.17



SOURCE: Banco de España.

...and the *capital principal* ratio was 10%

Banco de España Circular 7/2012 implementing Law 9/2012 asks institutions to prepare exceptionally a statement as at 1 January 2013 applying the new definition of capital principal (core capital), and takes as denominator the risk-weighted assets at December 2012. Using this information, the capital principal (core capital) ratio of Spanish deposit institutions excluding Group 1 and 2 institutions was calculated to be 10.2% (see Chart 2.16).

The own funds of these institutions fell, although their quality increased slightly

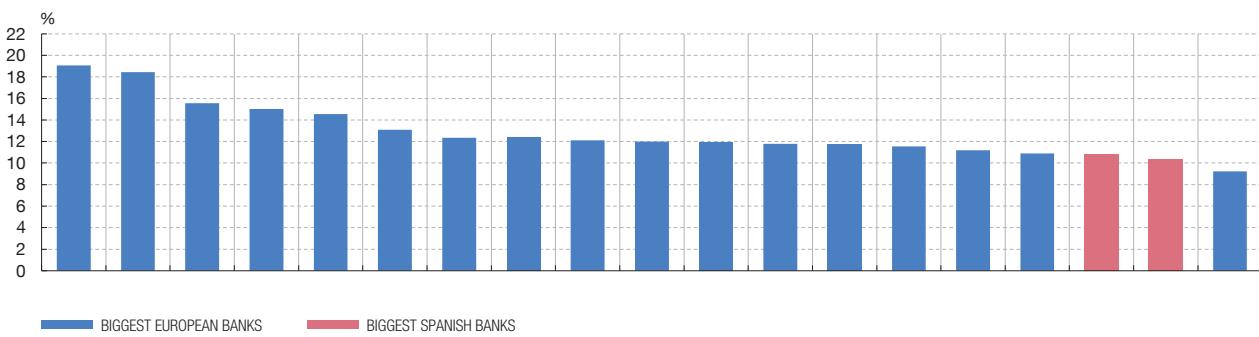
The total own funds of deposit institutions as a whole excluding Group 1 and 2 institutions decreased by 9.3%, tier 1 capital was down by 8.4% and tier 2 capital fell by 16.5% (see Chart 2.17.B). This downturn in own funds was compatible with a slight increase in their quality, since the relative weight of higher-quality own funds in the total increased (by 1 pp to 91.9% of the total). The behaviour of the various components of tier 1 capital was very uneven.

Thus capital grew at a rate of 20.7%, 3.7 pp more than in December 2011, whereas reserves decelerated by 7.4 pp, since they decreased at a rate of 9%. This decline in

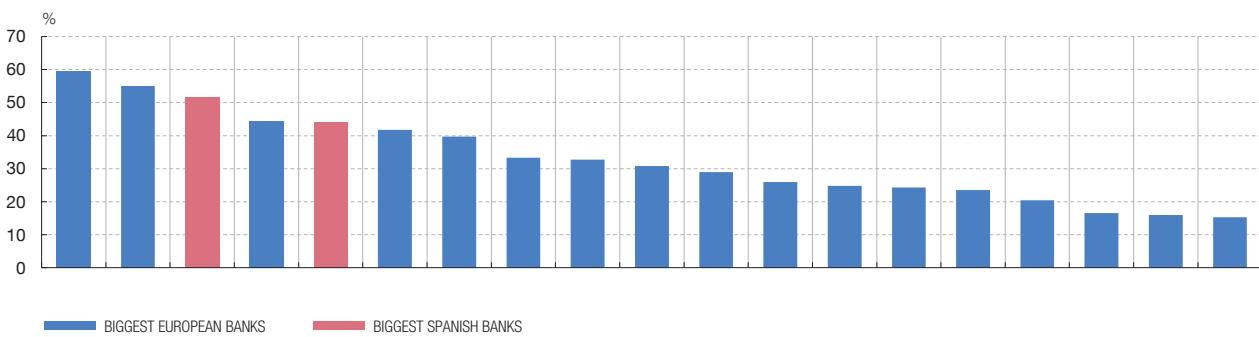
## SOLVENCY OF THE BIGGEST EUROPEAN BANKS (a)

CHART 2.18

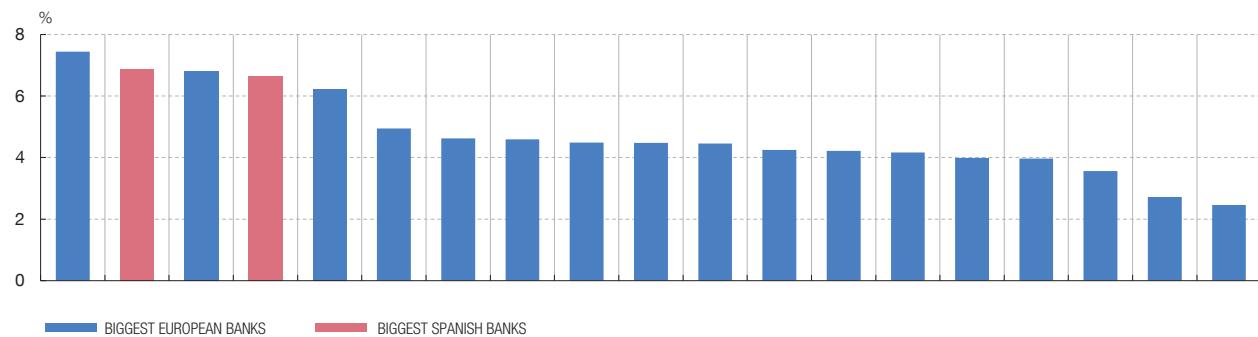
### A. CORE CAPITAL RATIO. DECEMBER 2012



### B. RWA AS A PERCENTAGE OF TOTAL ASSETS. DECEMBER 2012



### C. SHAREHOLDERS' EQUITY AS A PERCENTAGE OF TOTAL ASSETS. DECEMBER 2012



SOURCE: SNL Financial.

a. The biggest banks in Belgium, Denmark, France, Germany, Italy, Netherlands, Portugal, Spain, Sweden, Switzerland and United Kingdom are taken. Each panel depicts the banks in descending order for the variable in question.

reserves was due to the lower profits recorded in 2012 by these banks as a whole (see Chart 2.17.C).

The decrease in tier 2 capital is compatible with the regulatory trend – both in Spain and generally – of giving greater importance to higher-quality capital. Specifically, subordinated debt was nearly 20% lower in December 2012 than in the same period a year earlier (see Chart 2.17.D).

The requirements of total deposit institutions excluding Group 1 and 2 institutions fell by 6.8% with respect to the previous year (a fall 1.4 pp higher than that in December 2011).

This was mainly due to the requirements for credit risk, which account for 86% of the total requirements (see Chart 2.17.A).

Spanish banks stand in a low relative position regarding capital ratios compared with European institutions, although their position is better as regards leverage

The capital ratios of the large European institutions are practically all above 10%, including those of the two main Spanish institutions (see Chart 2.18, in which 12 of the 19 institutions have ratios between 10% and 12.5%). The solvency ratios of European banks are, in relative terms, higher than those of Spanish banks. The low relative position of Spanish banks compared with their European counterparts regarding the capital ratio is reversed in the case of the leverage ratio (own funds as a proportion of total assets per books).

### 3 OTHER MATTERS

Chapter 3 of this report is devoted to three matters with more or less immediate repercussions on the situation and analysis of financial stability. Firstly, the current status regarding the creation of a single banking supervisor in the euro area is described, the first step towards achieving a Banking Union. Secondly, and also from an international perspective, the activities of the European Systemic Risk Board (ESRB) are outlined. Finally, the last part of the chapter lists the key transparency initiatives taken in recent years in relation to the Spanish banking sector.

#### 3.1 Current situation regarding the single banking supervisor

In June 2012 the euro area Heads of State called for the creation of a single banking supervisor as the first step towards a Banking Union...

... which translated into an EU Council resolution to establish a single supervisory mechanism (SSM)...

... in which the ECB and national supervisory authorities will work together...

... and which will be governed by a Supervision Council entrusted with submitting proposals to the ECB Governing Council

The ECB will assume direct supervision of significant banks...

In June 2012, in order to enhance the quality of supervision in the euro area and to help break the negative link established between confidence in banks and doubts about the sustainability of public debt, the euro area Heads of State released a statement calling for the creation of a single banking supervisor as the first step of the so-called Banking Union, which is to be complemented by the institution of a single resolution mechanism and a harmonised deposit guarantee scheme.

Following this mandate, the Ecofin session of the European Union Summit on 12 December 2012 unanimously agreed on the legislative proposals aimed at establishing a single supervisory mechanism (SSM) for credit institutions. These proposals comprise a draft Regulation that entrusts supervisory tasks to the European Central Bank (ECB), and another draft that amends the European Banking Authority's (EBA) regulations in order to adapt it to the new circumstances. These legislative initiatives are being negotiated with the European Parliament in the so-called trilogies for their approval and, where appropriate, to be submitted for consultation with those Member States' Parliaments whose legal system requires this.

Once the regulations are in force, the ECB will have 12 months to effectively set the single supervision arrangements in motion.

The SSM will be a new supervisory agency in which the ECB and the various national supervisory authorities will work together. Overall responsibility for its workings will lie with the ECB, on which extensive prudential supervision powers have been conferred under the attendant regulations.

As regards governance, a Supervision Council will be created. Represented on this body will be both national supervisors and the ECB, which will be tasked with implementing supervisory responsibilities and with submitting proposed decisions on banks to the ECB Governing Council.

The SSM will be responsible for the prudential supervision of all deposit institutions of the euro area and of those European Union countries that wish to join the single supervisory mechanism, but this task will be executed under a framework that differs depending on the importance of these institutions.

The regulations envisage that the ECB, with the support of the national authorities, will assume the direct supervision of significant deposit institutions, understood as those with assets at the consolidated level that exceed €30 billion or 20% of the Member State's GDP; those that may be considered relevant in light of their cross-border activities; those

... while the remaining banks will continue to be supervised by the national authorities

The run-up to the launch of the SSM will be complex, so various working groups have been duly created

that have received financial aid from the European Stability Mechanism; and, in any event, the three biggest banks of each participating country.

The remaining banks that do not meet the thresholds for being considered significant will continue to be supervised by the national authorities, although the latter must take supervisory decisions following the rules, guidelines or instructions of the ECB, which may initiate whatever investigations it considers necessary or may even assume direct supervision of a bank if it considers it necessary to ensure the application of appropriate supervisory standards.

The complexity and scale of the task necessitate an intense preparation of the run-up to the launch of the SSM, meaning a demanding work schedule has been set. In this connection, under the leadership of the High-Level Task Force on Supervision chaired by the president of the ECB, a Task Force has been set up which will perform its work through four groups:

- Working group 1 on bank cataloguing. It is tasked with compiling data so as to have a catalogue of euro area banks that will assist the ECB in determining the significance of European deposit institutions and, by extension, their supervisory regime.
- Working group 2 on legal matters. Concerned with the implementation of the Council's Regulation to set the internal organisational framework of the SSM, in which the respective supervisory roles of the ECB and the CNAs must be specified.
- Working group 3 on the supervision model. Its aim is to provide a practical description of how the SSM would carry out the supervision of the main types of banks in the euro area.
- Working group 4 on financial reporting. Concerned with the analysis of the standards in force in the various Member States, in order to set the broad guidelines for the periodic reporting of banks' confidential returns to the SSM and to draw up a proposal for uniformity.

Lastly, it should be pointed out that the proposed amendment of the EBA Regulation is closely connected with the SSM project, and one of its aims in particular is that decision-making in the single market should be balanced following the assumption by the ECB of direct responsibility for supervision in a significant number of countries in the European Union.

### 3.2 Recent measures of the European Systemic Risk Board (ESRB)

The European Systemic Risk Board (ESRB) came on stream in January 2011, its mission being to prevent or mitigate systemic risks that may jeopardise financial stability in the EU

The European Systemic Risk Board (ESRB) commenced operating in January 2011, its mission being to prevent or mitigate systemic risks that may jeopardise financial stability in the EU.<sup>1</sup> The ESRB has since been active in various areas relating to the macroprudential supervision of the financial system. Firstly, from a short-term perspective, it has analysed the main threats to financial stability in the EU in the context of the crisis; secondly, it has conducted analysis aimed at detecting potential medium- and long-term risks; thirdly, it has been working continuously on the creation of a conceptual framework and of institutional arrangements enabling an effective macroprudential policy to be pursued; and lastly, it has issued recommendations in an attempt to prevent certain potential risks to financial stability in the EU from materialising.

<sup>1</sup> For a detailed review of the structure, objectives and instruments of the ESRB, see "The European Systemic Risk Board and macroprudential oversight in Europe", published in Chapter 3 of the November 2011 Financial Stability Report.

The ESRB's recent assessment of risks highlights the fact that there has been a widespread improvement in conditions on financial markets...

... although uncertainty is still high and the financial system remains vulnerable to potential macrofinancial shocks

In December 2012, the work of the ESRB to assess potential risks to financial stability in the EU took the form of two public recommendations

The first set of recommendations addresses risks relating to the funding of the banking sector

The second set of recommendations refers to risks associated with money market fund operations, which are considered a key component of the "shadow banking system"

The ESRB's recent assessment of risks highlights the fact that there has been a widespread improvement in conditions on financial markets. This can be seen, among other aspects, in the easing of tensions on the sovereign debt markets, in the decline in yields on corporate bonds and in banks' improved access to financing. Further, there are signs of some improvement in respect of the fragmentation of EU financial markets.

However, the ESRB states that the level of uncertainty is still high and that the financial system remains vulnerable to potential macrofinancial shocks. In particular, it stresses the fact that worse-than-expected economic developments might have an adverse impact on credit institutions' profits. Also, uncertainty over bank balance sheets might affect banks' ability to raise capital and to obtain funding on the markets, as well as to provide credit to the real economy, a factor which, in turn, might place the economic recovery at risk. Given the persistence of these risks, the ESRB emphasises the need for further efforts to shore up confidence in bank balance sheets and, in this respect, it points to the advisability of improving the degree of harmonisation of concepts such as forbearance – loan rollover and rescheduling practices that banks use when borrowers cannot meet their payments – and non-performing loans.

The ESRB has likewise highlighted the risks that might arise from maintaining a low interest-rate setting over time, and in particular of the business model of life insurance companies, insofar as it is difficult in the current low-yield environment for companies in some countries to obtain the returns they have committed to, and search-for-yield incentives may emerge.

In December 2012, the work of the ESRB to assess potential risks to financial stability in the EU took the form of two public recommendations.<sup>2</sup> The first focuses on the vulnerabilities associated with bank funding, while the second refers to the risks relating to money market funds.

The first set of recommendations addresses risks relating to the funding of the banking sector. Firstly, to prevent the risks associated with the excessive fragility of bank funding structures, the ESRB recommends that supervisors monitor these risks more closely through detailed analysis of banks' funding plans. Secondly, it has issued various recommendations concerning the increase in so-called "asset encumbrance" (a concept that refers to the portion of assets that is committed as a result of their use in secured financing operations). The ESRB recommends reinforcing the monitoring of this risk by banks and supervisors, and improving transparency in respect of the levels of and changes in asset encumbrance. Finally, the ESRB has issued a recommendation aimed at identifying best practices in relation to covered bonds and at promoting the harmonisation of national regulatory frameworks in this area.

The second set of recommendations refers to the risks associated with money market fund operations, which are considered a key component of the "shadow banking system". These recommendations address various aspects relating to the liquidity and public reporting requirements for these institutions, although the key recommendation is that which refers to the progressive and mandatory conversion of constant net asset value funds, which in some countries play a significant role, into variable net asset value funds. This is considered necessary to head off the potential destabilising effects that might stem from a massive withdrawal of funds from this type of institution (which are not accounted for at fair value).

<sup>2</sup> The documents relating to these recommendations can be viewed at: <http://www.esrb.europa.eu/recommendations/html/index.en.html>.

The deadlines set in the first three recommendations by the ESRB expired during the course of 2012

Regarding the development of an analytical and conceptual framework for macroprudential policy, the ESRB has continued its work and, from September 2012, the so-called “risk dashboard” began to be published

As laid down in legislation, the European Commission will review the first two years of operation of the ESRB in the course of 2013. One key factor will be to clarify the macroprudential policy framework in the EU in light of developments concerning a single banking supervisor

### 3.3 Progress on transparency in the Spanish banking sector

In periods of high uncertainty it is particularly important to provide reliable and comprehensible public information

The Banco de España has adopted various measures geared to improving the information available on the situation of the Spanish banking system

Lastly, regarding the recommendations, some of the deadlines laid down in the first three recommendations by the ESRB expired in the course of 2012.<sup>3</sup> Accordingly, those agents at which the recommendations were directed have already sent in their replies. The preliminary assessment of the reaction to the ESRB recommendations may be classified as positive, although work continues on the development of a broad framework for assessing the degree of compliance with the recommendations.

The ESRB has been pursuing its work geared to improving the analytical and conceptual framework of macroprudential policy. In this respect, in September 2012 it began to publish the so-called “risk dashboard”, which involves a set of financial stability indicators for the EU as a whole and which will henceforth be published quarterly. In addition, the ESRB is developing a framework aimed at establishing a clear link between a series of intermediate macroprudential policy targets (e.g. to mitigate excessive credit growth) and a set of instruments associated with these targets (e.g. the countercyclical capital buffer). Ultimately, the aim is to ensure that the macroprudential authorities have suitable instruments to tackle the main potential sources of systemic risk.

Finally, as envisaged in the legislation, the European Commission will review the first two years of operation of the ESRB in the course of 2013, and it will consider the need to introduce regulatory changes. A key factor in this assessment will be the clarification of the macroprudential policy framework in the EU, bearing in mind the implications of the imminent creation of the Single Supervisory Mechanism (which will also have competences in this area).

From the standpoint of the banking sector, the availability of full, accurate and comparable information on the situation of credit institutions is essential for markets to exert their disciplining function. This enables investors to assess the level and distribution of risks, and it lessens the incentives for banks to devise risky strategies, insofar as they perceive such strategies will be penalised.

Moreover, in periods of uncertainty and high risk aversion, the existence of information asymmetries preventing proper discrimination between banks may lead to mistrust about the system as a whole, raising funding costs for all banks (in these circumstances a problem of adverse selection arises). In these periods of high uncertainty it is thus particularly important to provide reliable and comprehensible public information.

As a result, the Banco de España has in recent years adopted various measures aimed at improving the information available on the situation of the Spanish banking system. In this respect, mention should be made of Banco de España Circular 5/2011 of 30 November 2011, amending Circular 4/2004 on public and confidential financial reporting rules and formats. This new Circular formally established the obligation for credit institutions to publish annually – with data as at 30 June – individual and consolidated figures offering quantitative and qualitative information on the mortgage market and financing for construction, real estate development and house purchases, along with information on assets received in payment of debts.

<sup>3</sup> The content of these recommendations was summarised in the April 2012 *Financial Stability Report*.

Circular 5/2011 made it mandatory for banks to include in their annual reports information on their policies to address loans to the real estate sector whose recoverability is problematic

Furthermore, it made it mandatory for banks to include in their annual reports information on their policies for addressing loans to the real estate sector whose recoverability is problematic. The information required includes various aspects of substantial importance for understanding the risks associated with these assets, including most notably the gross amount of exposures; the difference between this amount and the value of the collateral; the portion removed from assets for having been classified as written-off; the volume of financing earmarked for construction and real estate development – broken down on the basis of whether it is mortgage-backed or not – and the volume of financing granted to households for house purchases, indicating which fraction thereof is classified as doubtful along with the loan-to-value ratio of these transactions in accordance with the latest available valuation of the collateral.

Finally, Circular 5/2011 established that the information published by credit institutions should include the policies laid down to deal with foreclosures or assets received in payment of debts.

The introduction of these public reporting requirements entailed a clear improvement in the transparency of those aspects in which market mistrust was concentrated and particularly concerning exposures to the real estate sector. Nonetheless, doubts over the soundness of the Spanish banking system persisted and, in 2012, it was deemed advisable to further reinforce public financial reporting rules.

Circular 6/2012 demanded additional information...

The new requirements reflected in the MoU agreed between the Spanish and European authorities in July 2012 were included in Circular 6/2012 of 28 September 2012. On one hand, the Circular finalised transparency requirements for the aforementioned exposures to construction and real estate development, laying down new reporting requirements relating to foreclosures or assets received in payment of debts which are transferred to asset management companies set up by the institution or in which the institution has a stake.

... on refinancing and rescheduling operations...

On the other hand, additional reporting requirements were introduced, making it mandatory for banks to disseminate in their annual accounts detailed information on refinancing and rescheduling operations, and on both sectoral and regional risk concentration. Coinciding with the publication of their 2012 accounts, banks have begun to publish the amount of refinanced or rescheduled operations, explicitly classifying them as exposures subject to monitoring, sub-standard or doubtful (see Box 2.1 of this Report). This information also reflects the credit risk provisions for these exposures, distinguishing them by type of counterparty and purpose of the loan. Further, banks that use in-house models to calculate own-funds requirements have to publish their estimation of the probability of default of each type of transaction. Lastly, the Circular lays down the obligation to publish a brief summary of each bank's general refinancing and rescheduling policy, explaining the measures to be applied to different types of loans and the criteria used to assess the sustainability of such measures. It is difficult to find other financial systems, especially in Europe, with such stringent reporting requirements.

... and on the sectoral distribution of borrowers and on the end-purpose of loans

Turning to risk concentrations, the Circular stipulates that banks shall break down their lending having regard to the sectoral distribution of borrowers and of the end-purpose of loans, so that when loans are secured they shall be grouped by segment on the basis of their loan-to-value ratio. Moreover, banks shall provide aggregate information on their risk concentrations, broken down by region and segment of activity. In turn, this information shall be distributed by institutional sector, distinguishing between credit institutions,

general government, other financial institutions, non-financial corporations and sole proprietorships (differentiating between construction and real estate development, civil engineering construction and other purposes), and households and non-profit institutions serving households (distinguishing, depending on end-purpose, between housing, consumption and other purposes).

In short, the approval of Circular 6/2012 has brought about a most considerable improvement in public financial reporting which, in future, should allow shareholders and market participants to assess with greater accuracy the situation of Spanish credit institutions.

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### Financial legislation and official registers

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1 The publications in this section distributed by the Banco de España [all of them, except those marked (\*) and (\*\*), which are distributed by Alianza Editorial and Macmillan (London)] have been removed from the catalogue.

2 Moreover, it is updated daily in the Statistics section.

3 A quarterly update of the tables of this publication is also disseminated on the Internet.

4 Available only on the Banco de España website until it is included in the publication *Circulares del Banco de España. Recopilación*.

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| <b>BANCO DE ESPAÑA</b><br>Eurosistema | Unidad de Publicaciones<br>Alcalá, 522 - 28027 Madrid<br>Teléfono +34 91 338 6363. Fax +34 91 338 6488<br>Correo electrónico: <a href="mailto:publicaciones@bde.es">publicaciones@bde.es</a><br><a href="http://www.bde.es">www.bde.es</a> |
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