

Banking Outlook

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Summary

1. Trends and developments in the Spanish banking sector

The system's NPLs maintained their downward trend for the 31st consecutive month despite the continued reduction in loans outstanding. The volume of new lending to households and SMEs grew in 2016. Spanish banks' solvency was reinforced, but profitability remains weak due to the interest rate environment and the reduced volumes, despite provisioning having returned to normal. Net profit was €6,139 million in the first half of 2016, 12% higher than in the same period last year.

2. Real estate exposure of the Spanish banking sector

The exposure of the 13 main Spanish banking groups to the property sector is gradually being reduced. If we analyse its components, we see that loans to property companies and developers show a high but declining NPL rate, and that deleveraging (120%) has been greater than that of residential mortgage loans (20%) in the period 2012-15. At the same time foreclosed or repossessed assets, while still on a rising trend, have started to stabilise over the past year.

3. Analysis of impaired assets in Europe

Considerable work has been done on quantifying impaired assets throughout Europe and making them more comparable, although work remains to be done. In 2014, the EBA published the first common definitions of NPLs and forbearance, for mandatory supervisory reporting. The ECB also held a public consultation on the matter, and other national and international bodies have also given their opinions. Future advances must work on aligning the definitions of the accounting and supervisory frameworks to facilitate comparisons, avoid overloading the institutions and move ahead with the banking union.

4. European stress test: large differences by country

Stress test results show that, in all solvency and profitability ratios analysed, European banks present large differences in terms of both their starting position (end of 2015) and their capacity to withstand an eventual adverse scenario (through the end of 2018). Spanish and Swedish banks are expected to have the greatest income generation capacity in the adverse scenario, whereas German banks' strength is called into question. Italian banks' asset quality and solvency problems are highlighted by the stress test results.

5. Implementation and effects of the regulatory reform

Prior to the G20 summit of 4 and 5 September last, both the Basel Committee and the Financial Stability Board (FSB), published reports to G20 leaders to inform them of progress on and the effects of financial regulatory reform. These reports cover such aspects as the degree of implementation of the Basel III framework, the challenges facing completion of the reforms and the identification of aspects that might require greater attention in the future.

6. Open banking

Providing third parties with direct access to banking data can increase competition, encourage innovation and improve customers' outcomes. This has led UK authorities to play a proactive role in the development of an Open Banking Standard through the use of Application Programming Interfaces (APIs) to exchange financial data directly.

1 Trends and developments in the Spanish banking sector

The tables and data are to be found in the appendices to this document. The majority of the data come from Chapter 4 of the Statistical Bulletin of Spain's central bank. The analysis of the Spanish banking sector is confined to banking business in Spain. The following are the main conclusions on the current situation and recent trends and developments in the Spanish banking system:

Activity

- The system continues to contract, for the fourteenth consecutive quarter (Table 1). Since 2008 balance sheet totals have fallen by 15%, and compared with the peak of 2012 the decline is 20% or €698 billion.
- Unlike lending to the domestic private sector, which has been on a clear downward trend since 2008, portfolios of financial assets, both fixed income and equities, have increased in size since the beginning of the crisis, particularly the sovereign debt portfolio. As a result the fall in balance sheet totals since 2008 is less than that in lending.
- Since 2008 the total volume of deposits has fallen by 20% (Table 1), but the most stable components (current accounts and savings and term deposits) have held up much better during the crisis (Table 6), with a cumulative decline of 2% since 2008. During the crisis there was a notable shift away from term deposits and into sight deposits and savings accounts, especially since 2012 due to the way interest rates have evolved in this period (Table 6).
- As for wholesale financing, on-balance sheet liabilities continue to decline (down by 48% since the end of 2008 and by 9% in the past twelve months, Table 1), in line with the reduction in the funding gap. The net amount of interbank lending (liabilities less assets) has reduced considerably in the past few years following a period of high recourse to ECB liquidity, which has declined by 62% since the high points of August 2012. This is compatible with institutions' taking advantage of the liquidity provided by the conditional liquidity auctions (TLTROs), as well as of that which they obtain in ordinary open market operations. Liquidity is no longer a problem for Spanish institutions.
- Installed capacity in the system continues to fall (Table 3) in line with the contraction in business volumes, the consolidation of the sector and the quest for greater operating efficiency and banking profitability.
- The system has become stronger during the crisis years. Own funds (capital and retained earnings) have increased by 29% or €52 billion since 2008.

Spotlight on lending and NPLs

- The system continues to deleverage. Lending to the domestic private sector continues to contract in 2016. It fell by 4% in the six months to the end of July, and the cumulative reduction since 2008 is 31% (€583 billion, or 53% of GDP). The pace of the decline has been moderating since the end of 2013. Lending to the domestic private sector has fallen across the board (Table 4), especially lending to businesses, with a cumulative reduction of 40% since 2008, and even more so in lending for construction and property development, which is down by 65%. Lending to households has fallen more moderately due to the greater duration of mortgage loans and the security associated with this type of lending.
- Meanwhile the number of new lending transactions (Table 5) bottomed out at the end of 2013 when it started to grow again for the first time since 2007. In 2015 all lending portfolios posted notable growth, a trend that has continued in the first seven months of 2016, with the exception of new lending

transactions to large corporates (loans of more than a million euros), which are able to tap other sources of non-bank financing. The 33% YoY fall in new lending to large corporates is also due to a strong base effect in 2015. In the first seven months of 2016 the total volume of new lending fell by 13% compared with the same period of 2015, precisely because of the decline in new lending to large corporates. New lending to SMEs picked up slightly and new lending to households posted YTD growth of 13% YoY. Since the end of 2013, therefore, the deleveraging of existing lending to the private sector has been compatible with the flow of new credit to households and SMEs.

- Despite the contraction in lending to the domestic private sector, the NPL rate in the system (Table 4) continues to improve steadily, standing at 9.39% in July 2016. The volume of doubtful loans has now declined for 31 months in a row, falling by €76 billion or 39% from its peak in December 2013. NPLs to the real estate sector continue to represent 39% of the total.

Results of the sector

- The cost of borrowing remains at low levels (Table 7). Data to July 2016 show interest rates on new lending transactions down in all lending portfolios in year-on-year terms. However, compared with the level at year-end 2015, rates for new loans to households have shown a slight uptick, whereas those for new loans to businesses have fallen further, especially for loans of more than €250,000. These reductions cannot be offset by cheaper deposits (Table 8), because although their cost falls, it does so to a lesser extent than lending rates, as a result of which the customer spread also narrows.
- The sector's results (Table 2) continue to be depressed by the same factors (lower business volume, all-time low interest rates and increasing regulatory demands). Total revenues fell by 9% YoY in the first half of 2016 due to the decline in all revenue lines.
- Operating expenses remained flat in the first semester of 2016. Although cost control is one of the defining features of the Spanish banking system, it seems unlikely to further improve profits by cutting costs having reached already a cost-to-income ratio of 50.5%. As a result, pre-provision profit fell by 17% YoY in the first half of 2016 over the same period last year due to the fall in revenues.
- Loan-loss provisions continued to moderate in 2016 (-42% YoY in the first six months of 2016), in line with the improving NPL situation and the volume of clean-up already carried out. Since the end of 2008 the system as a whole has carried out balance sheet clean-up operations (basically bad debts, restructuring costs and value impairment of foreclosed assets) to the tune of €311 billion.
- Pre-tax profit for the first half of the year dropped 4% whereas net attributable profit increased 12% year-on-year due to lower taxes in the second quarter of 2016.
- As regards the main ratios (Table 9):
 - The productivity of the system (volumes and pre-tax profit per office) improved slightly, as a result of which efficiency (cost-to-income ratio) was maintained at an excellent level of 50.5%, thanks also to cost control. Operating costs as a percentage of Average Total Assets have been held below 1% since 2008 (Figure 6, Appendix 1). This ratio's increase was due to the reduction in total assets.
 - The sector's solvency is also improving. The system's leverage fell to 11.7x in July, compared with its peak of 18.3x in 2010. This equates to a volume of own funds (capital and reserves) of 8.5% of total assets. Own funds on balance sheet have held steady throughout the crisis at above 100% of the volume of doubtful debt (Figure 2, Appendix 1), and since 2012 has increased to 192% as of July 2016.
 - As regards liquidity, the loans-to-deposits ratio has fallen to 111% as of July 2016, 47 percentage points less than in 2008 (Figure 3, Appendix 1). The sector's funding gap (lending to, less deposits

from, the domestic private sector) continues to narrow to all-time lows (4.8% of the balance sheet total) due to the deleveraging of the system and the stability of deposits.

- The provisioning "effort" (loan-loss provisions / pre-provision income) and cost of risk (loan-loss provisions / total lending) indicators, are back at pre-crisis levels (Figure 1, Appendix 1), contributing to the consolidation of profitability following the losses of 2011 and 2012 (Figure 5, Appendix 1).

International comparison

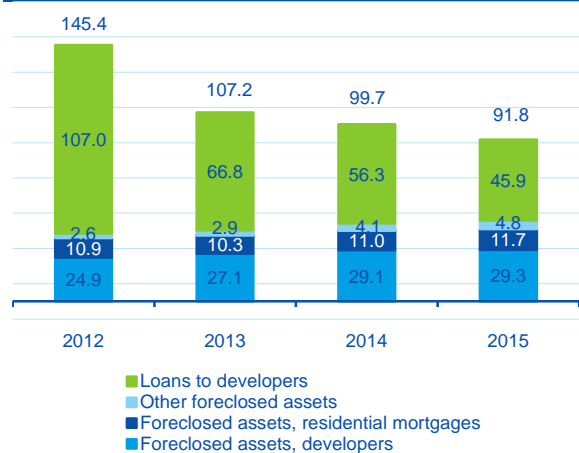
Comparing developments in the Spanish banking system with the average of EU banks (Appendix 2), the following are the main conclusions of the analysis of the data from the "Risk Dashboard" of the European Banking Authority (EBA), which show the average of 158 of the main EU banking institutions. The latest data available are as at March 2016.

- As for the strengths of the Spanish banking system (Figures 1 and 5, Appendix 2), since the end of 2009 (the date from which EBA data are available) Spanish banks have more capital in their balance sheets (+36%) and present a 15.5 pp better cost/income ratio than the average for European banks.
- The most negative aspect is the trend in NPLs, which are much higher in Spain and with faster growth (Figure 2, Appendix 2). Nonetheless, Spain's NPL rate has now been falling for 31 consecutive months.
- The system's profitability (Figure 4, Appendix 2) is slightly below the average of European institutions, as seems logical in a system with more capital on balance sheet. The clean-ups (Figure 3, Appendix 2) were necessary in the Spanish banking system to adjust the system's assets to their fair value. This effort brought coverage of NPLs with specific provisions to a level similar to the European average, where they subsequently remained, and which they have exceeded since mid-2014.

2 Real estate exposure of the Spanish banking sector: slow healing of disease

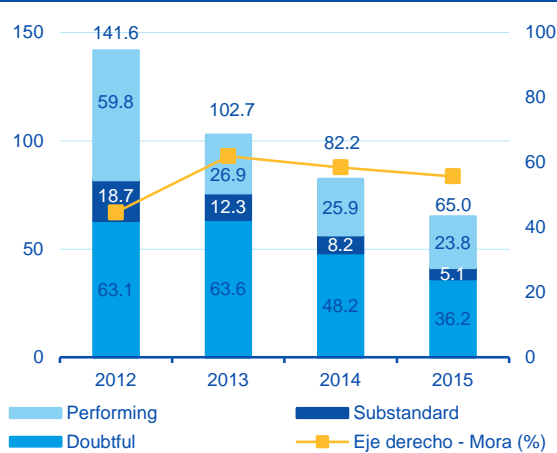
As at the end of 2015 the domestic businesses of the 13 main Spanish banking groups¹ had a total net exposure to the real estate sector – after deducting provisions - of around €92 billion (compared with €145 billion in 2012). The process of deleveraging is increasingly gradual (Figure 1). However, we need to analyse its components, since assets foreclosed or received in payment of debts show continued growth in the period 2012-2015 and break the trend.

Figure 1
Net exposure of the Spanish banking system to the real estate sector (€billions)



Source: BBVA Research based on banks' annual reports

Figure 2
Lending to property developers – Gross exposure (€billions) by category of risk / NPL (%)



Source: BBVA Research based on banks' annual reports

Lending to the Construction sector and Property Developers: deleveraging, and a high but declining level of NPLs

This portfolio was reduced to €65 billion in 2015, having been reduced by some €77 billion since 2012 (Figure 2). However, the NPL rate is very high, and although it has shown a slightly declining trend in the past few years, it has in no case fallen below 50%. The NPLs in this portfolio account for 39% of those of the entire system.

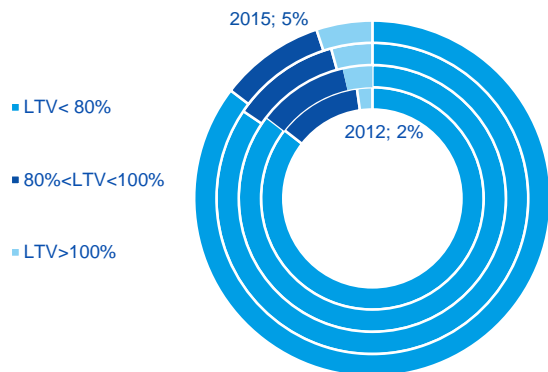
Residential Mortgage Lending: more gradual deleveraging

The total volume of this portfolio was €475 billion in 2015, and its deleveraging, at 20%, has been less than that of lending to the construction sector and real estate developers (120%) in the period 2012-2015.

Loans with an LTV of more than 100% increased, from 2% of the total in 2012 to 5% in 2015 (Figure 3). This phenomenon can be explained by a reduction in assessors' valuations - the denominator in the ratio - but perhaps also to some extent by the increase in new transactions. NPLs amounted to 27% of the total in 2015, compared with 12% in 2012 (Figure 4).

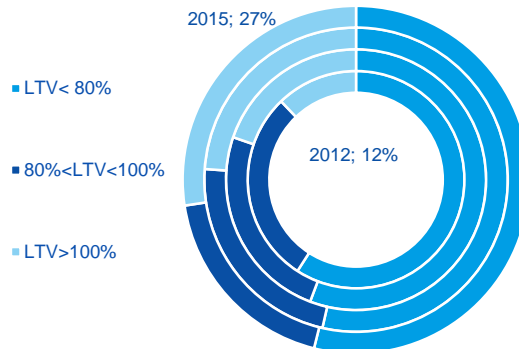
1: Abanca, Bankia, Bankinter, Banco Popular, Banco Sabadell, Banco Santander, BBVA, BMN, Caixabank, Ibercaja, Kutxabank, Liberbank and Unicaja, which include the various banks and savings banks merged or acquired over the course of the consolidation process that is taking place following the crisis. Data obtained from information published by the banks.

Figure 3
Total residential mortgage lending. Breakdown by LTV, 2012 (inner circle) to 2015 (outer circle)



Source: BBVA Research based on banks' annual reports

Figure 4
NPLs, residential mortgage lending. Breakdown by LTV, 2012 (inner circle) to 2015 (outer circle)

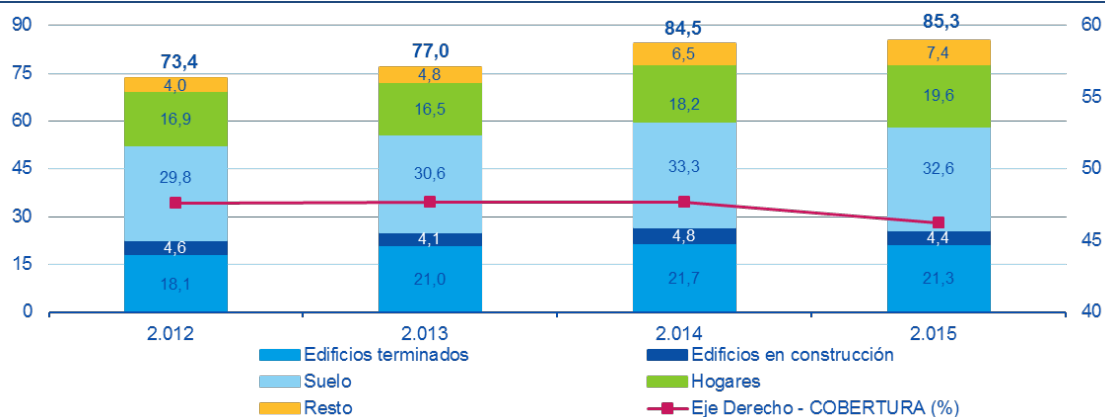


Source: BBVA Research based on banks' annual reports

Foreclosed Assets or Received in Payment of Debts: stable in 2015

Although active policies for selling banks' repossessed assets are headed in the right direction, they are insufficient. The gross value of these assets increased from €73 billion in 2012 to more than €85 billion in 2015 (Figure 5). They come mainly (around 70% of the total) from the property company and developer portfolio, and within this, land accounts for as much as 40% of the total. In 2015 total coverage (provisioning) remained fairly stable at around 46-47%, but with disparities among categories given the different legal requirements.

Figure 5
Assets foreclosed – Gross amounts (€billions) by source group / Provisioning (%)



Source: BBVA Research based on banks' annual reports

In short, the banks' exposure to the real estate sector is moderating very gradually. The aggregate figures conceal great disparities among banks, which face the future with differing degrees of comfort. In any case, work should continue on reducing exposure to the sector, which continues to be a significant burden inherited from the crisis.

3 Impaired assets in Europe: significant efforts have been made, but much remains to be done

Following the crisis, authorities and analysts have expressed concern about the large volume and low degree of comparability of the impaired assets that have accumulated in banks' balance sheets. In the context of the Banking Union (BU), work is being done to quantify the volume and standardise the definitions used in the various countries. Thus the Single Supervisory Mechanism (SSM) included among its strategic priorities for 2016² a study of the credit quality of loans to businesses and households. For this, it has set up a working group on NPLs, which is evaluating the situation of banks with high levels of NPLs and will propose actions to be taken. In the same line, this month, September, the European supervisor has launched a public consultation on the definition of NPLs, and it will probably propose objectives for reducing banks' NPLs, which will be confidential and not mandatory³.

The EBA (European Banking Authority) gave the first definitions of NPLs (non-performing loans)⁴ and forbearance (restructured or refinanced exposures) in the context of Regulation (EU) No. 575/2013 on prudential requirements, with a view to having banks present a complete picture of their risk profiles in the 2014 AQR (Asset Quality Review)⁵. Both have come to form part of the supervisory financial reporting forms known as FINREP which all EU credit institutions are obliged to complete, and they will be in addition to those required by member states' national authorities. Also in process is a consultation on guidelines on default⁶ and the regulatory technical standards on the materiality threshold of credit obligations past due⁷.

The Basel Committee on Banking Supervision (BCBS) has also carried out a study of the various criteria for determining impaired assets, making some recommendations for strengthening the applicable accounting and supervisory frameworks and making them more consistent. Lastly, IFRS 9, which comes into force for listed companies in January 2018, classifies assets by reference to risk and determines the loss allowance required in terms of expected loss, for which it defines the concepts of default and impairment.

All the work being done at international level is between two different frameworks: the prudential supervisory framework (of the EBA) and the accounting framework (of IFRS 9). There are numerous definitions straddling the two worlds, such as the new Banco de España Circular 4/2016 which seeks to adapt itself to the current prudential supervisory framework and lays the bases for the coming into force of the international accounting standards. The two frameworks must be compatible and mutually consistent. If the same names are used, they must refer to the same concepts; and if different terminology is used there must be clarity as to the differences. Once they have been implemented they must coexist and support one another. Clarity and transparency in these aspects will make it easier for banks to fulfil their obligations and for investors and supervisors to ascertain the banks' risk profiles.

It is also important to standardise the various definitions and frameworks, or at least to minimise the differences among them, for the following reasons:

2 : ECB Banking Supervision: SSM Priorities 2016

https://www.bankingsupervision.europa.eu/ecb/pub/pdf/publication_supervisory_priorities_2016.en.pdf?024a0072fe923441556e5bba7251dd6d

3 : Italy's Banca Monte Paschi di Siena (MPS) admitted on 4 July that the European Central Bank (ECB) had urged it to reduce the volume of its bad and doubtful debts by €10 billion.

4 : In its recommendations for carrying out the AQR (EBA/REC/2013/04) it asks banks to use uniform definitions as far as possible.

5 : Implementing Technical Standard (ITS) on Supervisory Reporting (Forbearance and non-performing exposures), published in the OJEU as Regulation (EU) No. 680/2014

6 : Guidelines on the application of the definition of default, as per Article 178 of Regulation (EU) No. 575/2013, the Capital Requirements Regulation or CRR <http://www.eba.europa.eu/regulation-and-policy/credit-risk/guidelines-on-the-application-of-the-definition-of-default>

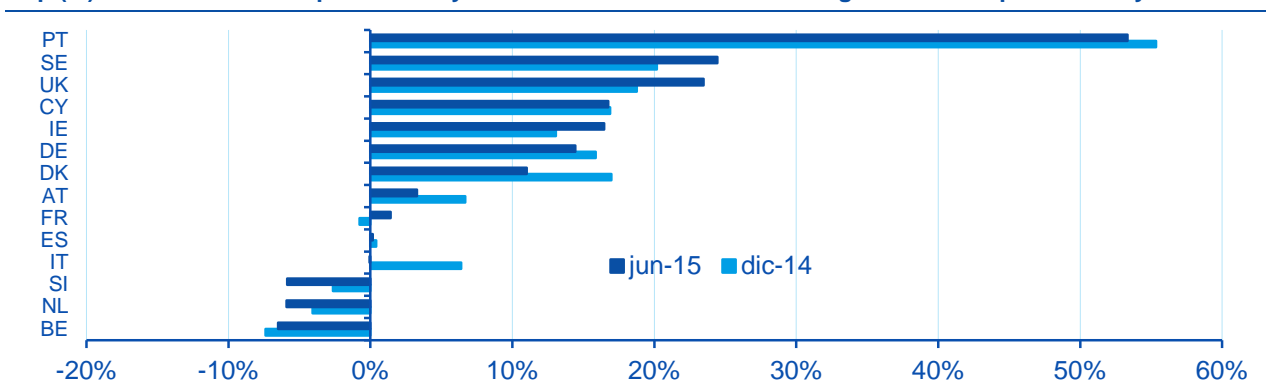
7 : Regulatory Technical Standards on materiality threshold of credit obligation past due, as per Article 178 of Regulation (EU) No. 575/2013, the Capital Requirements Regulation or CRR <http://www.eba.europa.eu/regulation-and-policy/credit-risk/regulatory-technical-standards-on-materiality-threshold-of-credit-obligation-past-due>

- Greater transparency regarding the risk profile of each institution, and greater comparability among them, thus making it possible to discriminate among them according to their fundamentals.
- Limitation of the effect of the different definitions on the calculation of provisions and risk-weighted assets and therefore on coverage and solvency ratios.
- It will be positive for the real economy. Gaining proper insight into the quality of the assets on banks' balance sheets will help provide a correct valuation of the assets and facilitate their sale, which will lead to more solvent banks with greater ability to perform their true role of financial intermediation. Furthermore, the literature points to there being a link between the level of impaired assets and the price of new lending transactions, so improvements in banks' credit quality could lead to adjustments in prices.
- All this work on standardising criteria at European level will enable progress to be made towards the banking union.

At European level, the data published by the EBA in its 2015 transparency exercise allow the first analysis with a standardised criterion to be made among the 105 institutions from 21 countries and also allow us to see which of them apply the standardised definition to their financial statements and not just top their supervisory reporting. In this way, we see that there are countries where the difference between the financial statements and the reporting to the supervisor is less than in others. The banks assessed in Belgium, the Netherlands and Slovenia declare more impaired assets in their balance sheets than with the EBA criterion.

Figure 1

Gap (%) between NPL data published by individual entities and the homogeneous data published by EBA



Source: BBVA Research based on EBA, Bankscope and individual entities

In Italy and Spain, institutions have adapted to a considerable extent to the standardised definition. However, there is a significant difference between the two countries. In Spain the process of adjustment took place at the end of 2012 thanks to the Banco de España guidelines on accounting for refinanced assets. In Italy on the other hand, the convergence between accounting and supervisory concepts took place in the second half of 2015, after the amendment to the definition of impaired banking business.

A third group of countries shows differences between the two frameworks. In general terms, the differences observed in Portugal, the UK, Ireland, Germany and France arise from different criteria for the number of days overdue and details of the notion of refinanced transaction or of carry-over effects at both transaction and borrower level.

All the work done so far on appropriately defining concepts and precisely quantifying impaired assets on banks' balance sheets must continue, since some points still need to be clarified in order for the accounting and supervisory frameworks to communicate easily with one another and for the institutions not to be overburdened by having to fulfil both reporting requirements. Being able to measure impaired assets with the same criterion is a first step for being able to advance towards a real banking union.

4 European stress test: large differences by country

This exercise, made public on July 29th, came in a moment of negative market sentiment around the banking sector, in particular towards European banks. Only 51 EU banks participated in the stress test, which excluded all Portuguese, Greek and Cypriot banks, as well as the majority of the banks that failed the previous stress test. This time no “pass or fail” threshold was established, and results will be used as an input for the 2016 SREP (Supervisory Review and Evaluation Process), and are more significant for the 37 entities supervised by the ECB.

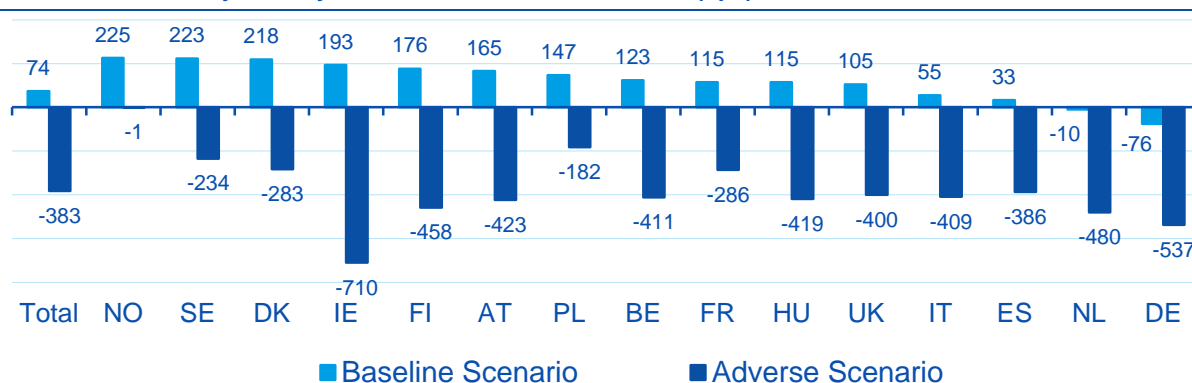
Results: impact on regulatory capital ratios

First of all, on a **fully-loaded CET1 ratio** basis the average starting point is 12.57% and it decreases to 9.22% in the adverse scenario at the end of 2018. However, the results should be analyzed considering two factors: First, the starting point is not the same for all countries. While Italy (11.41%) or Spain (10.45%) present lower average levels, others like Germany (13.30%) present higher ratios at year-end 2015. Second, the impact caused by the adverse scenario at the end of 2018 considerably differs between countries, with an average decline of 335 bps. Spanish banks show high resilience to adverse circumstances (-232 bps). The other large European banking systems would have a bigger impact: France (-292 bps), Italy (-380 bps), Germany (-387 bps) and the UK (-398 bps).

Other important take-outs from the results:

- **The greatest impact** expected on regulatory capital ratios, both for the whole sample of banks and for the Spanish ones, **comes from credit risk**. In most of the cases (the most notable exceptions being the Netherlands and Germany) credit losses are expected to completely offset the expected increase in earnings over the time horizon of the exercise.
- **Market risk** is expected to have a mild impact on all banking systems included in the exercise, which may seem counter-intuitive given the investment banking activities of many of the banks in the sample.
- **Even in the baseline scenario German and Dutch banks expect a decline in their average phase-in CET1 ratio** (figure 1).

Figure 1
Phase-in CET1 ratio by country. Baseline vs. Adverse scenario (bps)



Source: BBVA Research, EBA

Regarding the **fully-loaded leverage ratio** (calculated as Tier 1 capital divided by total risk exposure according to the CRR definition) the overall picture is similar to that of the CET1 ratio. Again we see large

differences by countries. The total starting fully loaded leverage ratio is 4.79% and it is expected to decline to 3.94% by year-end 2018 in the adverse scenario (-84 bps).

The starting point in 2015 showed an even larger disparity than that of the fully loaded CET1 ratio described above, with countries like Hungary and Poland close to 8% or above that level, whereas Denmark, France, Germany, Sweden and the UK started the exercise below 5%.

The impact of the adverse scenario on the fully-loaded leverage ratio is significant in most cases, with all banking sectors showing a decline of more than 60 bps, except for three of the four the Nordic countries (Sweden, Norway and Denmark). Again, the biggest impact is expected in Ireland. In the adverse scenario six countries (Austria, France, Germany, Ireland, Italy and the Netherlands) expect to have an average fully-loaded leverage ratio of less than 4%. These banking systems appear to be the less capitalized in relation to their size. In this vein, it should be noted that this ratio used risk exposures as denominator, not total assets.

Results: impact on revenue generation and profitability

Regarding the banking systems' capacity to generate revenues and earnings, **Swedish and Spanish banks present the best overall performance** in the adverse scenario. First, Spanish banks appear to be the strongest in terms of earnings generation in the adverse scenario. On the other hand, Germany is the only country that expects to generate net losses before credit and market risks are accounted for. Second, in terms of the severity of the adverse scenario, Swedish banks have the lowest impact on accumulated net attributable income due to the adverse scenario followed by Norwegian and Spanish banks. The worst performer is, again, Germany, whose income generation capacity appears to be significantly weaker than other countries'. Ireland, Italy, Holland and the UK also fare poorly in this metric.

In terms of profitability (measured as Return on Regulatory Capital) the case seems to be the opposite, with German banks showing the lowest negative impact in the adverse scenario. However, a closer look shows that German banks' starting point in 2015 is very much affected by Deutsche Bank's net loss of €7bn. Thus, German banks' profitability presents the lowest impact of all countries in the adverse scenario as their starting point was already low. Anyway, as has been just commented, their income generation capacity is the weakest of all banking systems in the sample. Other than the German banks, UK banks expect the lowest impact on RoRC in the period to 2018 in the adverse scenario.

Overall assessment of the exercise

The stress test results provide little clarity on the need for capital increases across Europe as there is no minimum requirement to meet this time. On the other hand, the exercise greatly enhances transparency in the EU banking industry and provides a large amount of data that will be used by the markets. As for the main banking systems in Europe:

Italian banks: the solvency and asset quality problems of Italian banks have been in place for a long period of time, and it is of foremost importance to deal with them in order to preserve financial stability, to guarantee that banks can support the economic recovery and to progress in the Banking Union.

French banks have gone through the stress test fairly well, on average in all the main metrics.

German banks: their strength after the stress test is in doubt. German banks have been the only ones that in aggregate expect to generate net losses in the three-year period of the exercise and to see a decline in CET1 ratio even in the baseline scenario (in this case together with Dutch banks).

Finally **Spanish banks** fare well, especially in terms of income generation capacity in the adverse scenario. Regarding capital ratios, Spanish banks expect a mild impact from the adverse scenario.

5 Implementation and effects of the regulatory reform

Prior to the G20 summit of 4 and 5 September last, both the Basel Committee and the Financial Stability Board (FSB), published reports to G20 leaders to inform them of progress on and the effects of financial regulatory reform. These reports cover such aspects as the degree of implementation of the Basel III framework, the challenges facing completion of the reforms and the identification of aspects that might require greater attention in the future.

Basel report on the implementation of the Basel III framework

This is the Committee's seventh report to update the G20 leaders on the state of implementation of the regulatory reforms in the framework of Basel III. This report contains the result of the Regulatory Consistency Assessment Programme, which includes: i) implementation monitoring of the Basel standards; and ii) consistency assessment of the prudential regulations at national level and analysis of results.

- As regards the **adoption of the Basel standards**, there has been notable progress in both member and other jurisdictions. Among the former, all have adopted basic elements of the Basel III framework such as the risk-adjusted capital requirements, the capital conservation buffer and the short-term liquidity requirement. Progress also continues to be made on the implementation of other standards such as the leverage ratio, the counter-cyclical buffer and the net stable funding ratio (NSFR). As regards non-member jurisdictions, there has been a significant increase in the number of them adopting the basic elements of the framework, and it is expected that by the end of 2016 they will have been adopted by 64 countries.
- On the other hand, there are other requirements for which a later implementation date has been established. For example: i) margin requirements for non-centrally cleared derivatives; ii) the revised Pillar 3 framework; and iii) the standardised approach for measuring counterparty risk. The jurisdictions are striving to meet the deadlines set, although some are reporting difficulties in their transposition, deriving both from national legislative processes and from the significant challenges involved in adapting information systems to the new requirements.
- On the **monitoring of results and their consistency**, the report shows that institutions have continued to strengthen both their capital bases and their buffers of liquid assets. Thus the average capital ratio for internationally active banks was above 12.5% in 2015, contributing to a greater reduction in the capital deficit. The leverage ratio also shows improvement, increasing to 5.2% from 5% in December 2014. As for liquidity ratios, the average short-term ratio stands at 123.6% and the stable funding ratio at 111.9%.

Report of the FSB on implementation and effects of the regulatory reforms

This is the second annual report to the G20 on the implementation and effects of the reforms. It covers progress on implementation of the reforms and their effects, and also highlights areas that need to be followed up in the future.

- Further progress has been made on the implementation of measures in the four main areas of the reform programme:
 - i. **Financial institutions are increasingly resilient.** The implementation of the Basel III capital and liquidity framework has been carried out generally on time, although there are still discrepancies in some advanced economies between national and Basel standards.
 - ii. Measures have been adopted with regard to **systemically important institutions**: processes have been put in place for identifying them, as have regulatory standards for G-SIBs (requirements for absorption of

losses and more intensive supervision). However, more work still needs to be done on constructing effective resolution regimes.

- iii. The **reform of the derivatives market** is under way: the areas of capital and reporting requirements are the furthest advanced. Much work remains to be done, one of the main challenges being the elimination of barriers to full reporting of trade information to trade repositories and supervisors' access to it.
 - iv. Lastly, as regards the **shadow banking system**, the main reforms agreed are aimed at identifying and supervising entities, money market funds and securitisation transactions, although few steps have been taken in this direction so far.
- As regards the **effects of the reforms, the report stresses that in general they have been positive**. Financial institutions are more resistant than in the past, although they are engaged in a process of redefining their structure and business model in response to the new environment in which they operate and in search of appropriate profitability. Apart from this, the financial system has shifted towards greater dependence on markets and less on banks. Non-financial intermediation has increased in several advanced economies. However, it is important to bear in mind that this new structure may also be a source of new vulnerabilities.
 - Lastly, looking ahead, the report identifies **three main areas that will require monitoring**:
 - i. Market liquidity: in the past year concerns have been expressed regarding the liquidity of fixed income markets, although there is insufficient evidence to be able to say that it has actually deteriorated. Moreover, these concerns arise at a time when financing is becoming increasingly market-based.
 - ii. Effects of the reforms on emerging market and developing economies (EMDEs). Concerns about possible unintended consequences deriving from the implementation of the reforms. Some jurisdictions have expressed concerns that the secondary effects of the reforms might reduce the presence and activities of the global banks.
 - iii. An open, global, integrated financial system. The reforms have helped to avoid market fragmentation. The securities markets continue to integrate, and the reform of the derivatives market has not led to a disruption of the global market for these products. It is necessary to continue working on monitoring the effects of the reforms on financial integration and on promoting international cooperation among members.

6 Open banking

Encouraging innovation and competition

Open banking initiatives grant third parties direct access to banking data through the use of Application Programming Interfaces (APIs). These allow different software applications to communicate with each other and exchange data directly, without the need for human input each time. APIs can help customers share their transactional data with other players or initiate transactions (e.g. credit transfers) via third party applications. From the regulators' perspective, this kind of "openness" of the banking system can increase competition, encourage innovation and improve customers' outcomes.

Data have always been a source of competitive advantage in almost any industry, and their relevance is growing due to the increase in digital activity, greater data processing capabilities and new analytical techniques. All these trends have given rise to the highly popular concept of "big data". If appropriately used, data provide knowledge of the market as well as of individual customers' conditions, allowing firms to take strategic decisions, make individually tailored offers or conduct creditworthiness assessments. The latter, for instance, is particularly relevant in the lending business and provides a competitive advantage to lenders with established customer relationships. If new providers cannot get access to relevant data for assessing credit risk -or if access is relatively difficult- these information asymmetries may create barriers to entry and restrict competition. APIs can avoid this happening by allowing customers to share their banking data, in a standardised format, with other providers.

The degree of competition in a market also depends on consumers' ability to compare prices and quality of different products and services as well as on the ease of switching between providers. In recent years, online comparison services of financial products have flourished. They provide customers with basic comparisons of current accounts, deposits, insurance, credit or investment products. These comparisons could be enhanced and made more individually tailored if customers could easily share their banking data via APIs. Moreover, APIs can facilitate switching providers by allowing customers to take their historical banking records with them, not losing information when they move from one service to another.

APIs can also benefit consumers by facilitating innovation in financial services. Having access -with customers' consent- to account information or banking functionalities allows existing or new players, commonly known as FinTechs, to develop innovative value-added services to the benefit of consumers. These range from new payment services, which initiate credit transfers on behalf of the user, to financial advisory services that, based on the information they compile from the user's bank accounts, provide him with financial management tools, alerts or personalised suggestions. APIs may also facilitate direct connection of accounting software services for SMEs with the firm's bank accounts, removing manual tasks and potential human error.

As already explained, from the regulators' perspective, granting third parties access to banking data and processes encourages innovation and competition. However, why should APIs be used instead of relying on other mechanisms for accessing or exchanging data? Firstly, APIs allow the communication between the bank and the third party to be direct, automatic and in real time. In contrast, when data files are manually downloaded and uploaded to third parties by customers, there is a risk of information being altered, and shared data cannot be automatically updated. Secondly, when APIs are used, third parties do not need to access sensitive login details or passwords, and users have full control over which data they are sharing and for how long, in contrast to what happens when third parties use "screen scraping" to access customers' bank accounts. The ongoing use of this mechanism by services that aggregate bank account information raises security concerns.

Despite all these positive aspects of “open banking” initiatives, drawbacks exist and should be considered. First, the sustainability of the banking infrastructure has to be preserved, by allowing banks to monetize the investments they make in maintenance and improvements. Second, opening the banking infrastructure to third-parties involves security and consumer protection risks that have to be mitigated.

Pioneering regulatory initiatives

In the European Union (EU), the new Payment Services Directive (PSD2), which will come into force in 2018, will require banks to grant licensed third parties access to bank accounts when authorised by the clients. To that end, the Directive introduces two new categories of payment service providers: account information service providers and payment initiation services providers. The former will be able to access only the information from designated payment accounts and associated payment transactions. The latter will be able to initiate credit transfers on behalf of the user. Both types of providers will have to be licensed, with more stringent authorisation requirements for payment initiation service providers since they will be able to initiate transactions and not just access data.

PSD2 sets certain rules on access to accounts by third parties, such as the explicit consent of the user, secure communication among all parties and the ban on using, accessing or storing any data for purposes other than providing the account information or payment initiation services. Moreover, banks will have to treat payment orders transmitted through a third-party without any discrimination in terms of timing, priority or charges with respect to payment orders transmitted directly by the payer. However, the Directive does not specify the technical mechanism through which access to accounts will have to be granted, and the European Banking Authority (EBA) is currently working on the Regulatory Technical Standards (RTS) for strong customer authentication and secure communication.

The United Kingdom (UK) is going a step beyond PSD2 by developing an open API standard in banking: a publicly available and single mechanism for data sharing in the financial sector. This will avoid the development of different API interfaces by each financial institution, which would make effective access to data more difficult and would limit innovation.

In August 2015, the UK's Treasury launched a joint industry and government initiative, the Open Banking Working Group (OBWG), to deliver a framework for the design of an open API standard in UK banking, focusing on personal and business current accounts. In February 2016, the OBWG released its final report with a proposed four-step calendar to fully implement the open API standard by Q1 2019.

However, in May 2016, in the context of a retail banking investigation, the UK's Competition and Markets Authority (CMA) released a provisional decision on remedies which includes requiring the nine largest retail banks to adopt and maintain common API standards by January 2018. This decision was confirmed, with no relevant changes, in the CMA's final report released on August 2016.

As a first step, product information (prices, charges, terms and conditions and customer eligibility criteria) and reference data (e.g. branch and ATM location) will have to be available via API services by Q1 2017. Full access to customers' transaction data sets and write functionality (e.g. payment initiation) will have to be up and running by January 2018 at the latest. Before then, banks will have to agree with the Government the composition, governance, funding and budget of an entity in charge of defining, implementing and maintaining the open banking standards.

Annex 1: principal monitoring indicators for the Spanish banking system

Table 1
Abridged balance sheet for the banking system. (EUR bn and % var.)

Assets	2010	2011	2012	2013	2014	2015	2016	Date	Growth rate			
									00-'08	08 - latest	y-on-y	
Total lending	2,153	2,106	1,951	1,716	1,651	1,603	1,568	Jul-16	217%	-27.9%	-3.1%	
<i>Public corporations</i>	79	90	114	87	101	90	95	Jul-16	69%	79.3%	-1.4%	
<i>Domestic resident sector</i>	1,844	1,783	1,605	1,448	1,380	1,327	1,287	Jul-16	234%	-31.2%	-4.3%	
<i>Non residents</i>	230	234	232	180	169	186	186	Jul-16	164%	-26.5%	4.6%	
Fixed income securities and equity stakes	564	656	766	773	754	662	651	Jul-16	132%	30.9%	-6.6%	
<i>Fixed income securities</i>	384	406	509	493	492	415	403	Jul-16	135%	23.8%	-9.7%	
<i>Of which: sovereign debt</i>	165	198	247	264	288	251	254	Jul-16	6%	153%	-1.0%	
<i>Equity</i>	180	251	258	280	262	246	248	Jul-16	128%	44.3%	-1.0%	
Interbank lending	234	251	279	211	155	164	150	Jul-16	81%	-43.0%	-4.3%	
Other assets (net of interbank lending/deposits)	301	387	426	326	354	331	355	Jul-16	230%	23.8%	4.4%	
Total assets	3,252	3,400	3,423	3,026	2,913	2,760	2,725	Jul-16	184%	-15.5%	-3.1%	
Liabilities and Shareholders' Equity												
Customer deposits	2,031	1,934	1,725	1,684	1,686	1,637	1,608	Jul-16	169%	-20.1%	-2.9%	
<i>Public corporations</i>	79	70	69	63	76	77	63	Jul-16	263%	-16.6%	-3.6%	
<i>Domestic resident sector</i>	1,440	1,373	1,317	1,314	1,289	1,261	1,247	Jul-16	192%	-13.0%	-1.6%	
<i>Non residents</i>	511	492	339	306	320	299	298	Jul-16	113%	-40.9%	-7.8%	
Interbank deposits	270	373	573	381	312	303	301	Jul-16	95%	-4.6%	-1.8%	
<i>Pro memoria: net interbank position</i>	36	122	294	171	157	139	150	Jul-16	215%	190%	0.8%	
Debt issued	433	435	394	297	249	225	205	Jul-16	625%	-48.1%	-9.4%	
Other liabilities	340	439	535	430	436	368	378	Jul-16	253%	18.4%	-4.7%	
Shareholders' equity	178	220	195	233	230	227	232	Jul-16	134%	28.6%	2.1%	
<i>Pro memoria: ECB funding</i>	70	132	357	207	142	133	136	Aug-16	566%	46%	-1.6%	
Total Liabilities and Shareholders' Equity	3,252	3,400	3,423	3,026	2,913	2,760	2,725	Jul-16	184%	-15.5%	-3.1%	

Source: Bank of Spain statistics bulletin

Table 2

Abridged income statement for the banking system. Cumulative annual results (EUR mn and % var.)

	2010	2011	2012	2013	2014	2015	2016	Date	Growth rate		
									00-'08	08-latest	y-on-y
Net interest revenue	34,292	29,565	32,739	26,816	27,118	26,411	12,174	Jun-16	92%	-30.7%	-9.8%
Net fees and commissions	11,870	11,750	11,275	10,931	11,257	11,237	5,502	Jun-16	79%	-15.5%	-3.4%
Trading gains and other revenue	17,151	15,811	15,493	17,797	17,043	13,884	8,300	Jun-16	276%	-8.8%	-11.3%
Total revenue	63,313	57,126	59,507	55,544	55,418	51,532	25,976	Jun-16	118%	-21.7%	-9.0%
Operating expenses	-29,431	-28,464	-26,951	-26,798	-26,116	-26,261	-13,121	Jun-16	54%	-11.1%	0.6%
Personnel expenses	-17,643	-16,889	-15,587	-15,108	-14,329	-14,182	-6,997	Jun-16	54%	-21.8%	-1.4%
Other operating expenses	-11,789	-11,574	-11,364	-11,690	-11,787	-12,079	-6,124	Jun-16	54%	5.5%	3.0%
Pre-provision profit	33,882	28,662	32,556	28,746	29,302	25,271	12,855	Jun-16	226%	-30.3%	-17.1%
Loan-loss provisions	-16,719	-22,668	-82,547	-21,800	-14,500	-10,698	-3,691	Jun-16	620%	-51.6%	-42.3%
Other income, net	-7,326	-23,430	-37,142	-2,789	-1,739	-3,819	-2,389	Jun-16	-299%	285.2%	15.4%
Profit before taxes	9,837	-17,436	-87,133	4,156	13,063	10,754	6,776	Jun-16	108%	-33.5%	-3.6%
Net attributable income	9,673	-14,717	-73,706	8,790	11,343	9,312	6,139	Jun-16	122%	-33.4%	12.4%

Source: Bank of Spain statistics bulletin

Table 3

Relative size, staff and installed capacity in the banking system (% , number and % var.)

	2010	2011	2012	2013	2014	2015	2016	Date	Growth rate		
									00-'08	08-latest	y-on-y
Lending to the private sector / GDP	171%	166%	152%	139%	133%	123%	117%	Jul-16	94%	-30.2%	-9.3%
Private sector deposits / GDP	114%	111%	111%	113%	111%	107%	105%	Jul-16	69%	-0.9%	-5.8%
Number of employees	263,715	248,093	236,504	217,878	208,291	202,954	n.d.	Dec-15	14%	-27.1%	-2.6%
Number of branches	43,267	40,202	38,237	33,786	32,073	31,155	30,359	Jun-16	17%	-34.2%	-4.1%

Source: Bank of Spain statistics bulletin

Table 4

Breakdown of ORS loans, NPLs and NPL ratio by portfolio. (EUR bn, % and % var.)

Lending volume	2010	2011	2012	2013	2014	2015	2016	Date	Growth rate		
									00-'08	08 - latest	y-on-y
Loans to households	813	793	756	715	690	663	665	Jun-16	236%	-18.8%	-2.2%
Of which:											
Housing loans	632	627	605	581	558	531	524	Jun-16	270%	-16.4%	-3.5%
Other loans to households	180	167	151	134	132	132	142	Jun-16	159%	-26.5%	3.0%
Lending to corporates and SMEs	1,013	971	830	719	674	644	614	Jun-16	237%	-39.6%	-7.2%
Of which:											
Lending to real estate	430	397	300	237	200	179	166	Jun-16	517%	-64.6%	-9.8%
Other lending to corporates and SMEs	583	574	530	482	474	465	448	Jun-16	142%	-18.2%	-6.2%
Total lending to domestic private sector *	1,844	1,783	1,605	1,448	1,380	1,327	1,287	Jul-16	234%	-31.2%	-4.3%
NPLs											
Loans to households	26.0	28.7	37.0	49.4	46.8	37.0	35.4	Jun-16	1062%	45.4%	-13.1%
Of which:											
Housing loans	15.2	18.2	24.0	34.6	32.6	25.5	24.4	Jun-16	1878%	64.2%	-13.7%
Other loans to households	10.8	10.5	13.0	14.8	14.1	11.4	11.0	Jun-16	607%	16.1%	-11.7%
Lending to corporates and SMEs	79.7	109.9	128.4	146.1	124.6	94.2	85.9	Jun-16	818%	130%	-20.0%
Of which:											
Lending to real estate	58.0	81.9	84.8	87.8	70.7	50.4	45.9	Jun-16	2790%	71%	-21.1%
Other lending to corporates and SMEs	21.7	28.0	43.6	58.2	53.9	43.7	40.1	Jun-16	232%	285%	-18.6%
Total lending to domestic private sector *	107.2	139.8	167.5	197.2	172.6	134.3	120.8	Jul-16	808%	92%	-17.7%
NPL ratio											
Loans to households	3.2%	3.6%	4.9%	6.9%	6.8%	5.6%	5.3%	Jun-16	246%	79.1%	-11.1%
Of which:											
Housing loans	2.4%	2.9%	4.0%	6.0%	5.9%	4.8%	4.7%	Jun-16	434%	96.5%	-10.6%
Other loans to households	6.0%	6.3%	8.6%	11.1%	10.7%	8.7%	7.8%	Jun-16	173%	58.0%	-14.3%
Lending to corporates and SMEs	7.9%	11.3%	15.5%	20.3%	18.5%	14.6%	14.0%	Jun-16	173%	282%	-13.8%
Of which:											
Lending to real estate	13.5%	20.6%	28.2%	37.1%	35.3%	28.2%	27.6%	Jun-16	369%	382%	-12.6%
Other lending to corporates and SMEs	3.7%	4.9%	8.2%	12.1%	11.4%	9.4%	8.9%	Jun-16	37%	370%	-13.3%
Total lending to domestic private sector *	5.8%	7.8%	10.4%	13.6%	12.5%	10.1%	9.4%	Jul-16	172%	178%	-14.0%

(*)Total ORS loans include household loans, total loans for productive activities, non-profit agencies serving households (ISFLSH in Spanish) and unclassified lending. Since January 2014 this has included loans to Financial Credit Institutions.

Source: Bank of Spain statistics bulletin

Table 5

Breakdown of new lending volume. Annual cumulative amount (EUR bn and % var.)

Lending volume	2010	2011	2012	2013	2014	2015	2016	Date	Growth rate		
									03-'08	08-'15	y-on-y
Loans to households	123.4	74.3	63.3	51.2	60.5	75.7	49.1	Jul-16	0.7%	-59.3%	13.2%
Of which:											
Housing loans	69.5	37.5	32.3	21.9	26.8	35.7	23.8	Jul-16	-15.6%	-59.0%	19.3%
Other loans to households	53.9	36.8	31.0	29.4	33.7	40.0	25.3	Jul-16	21.3%	-59.5%	8.0%
Lending to corporates and SMEs	665.0	527.5	484.8	392.6	357.2	392.6	196.0	Jul-16	29.2%	-57.7%	-17.9%
Of which:											
Less than €250,000	164.3	136.4	114.4	106.1	112.3	128.7	77.8	Jul-16	n.d.	-21.7%	4.9%
Between €250,000 and €1million)	46.0	37.7	31.6	28.3	34.0	36.8	21.8	Jul-16	n.d.	-20.1%	-2.3%
Corporates (loans > €1mill.)	454.7	353.4	338.9	258.2	210.3	227.2	95.4	Jul-16	43.5%	-60.3%	-32.9%
Total new lending flows	788.4	601.8	548.1	443.9	417.7	468.3	245.0	Jul-16	23.3%	-58.0%	-13.1%

Source: Bank of Spain

Table 6

Breakdown of resident deposits (EUR bn and % var.)

	2010	2011	2012	2013	2014	2015	2016	Date	Growth rate		
									00-'08	08 - latest	y-on-y
Sight deposits	262	270	265	282	329	384	425	Jul-16	100%	74%	15.5%
Savings deposits	211	203	199	206	222	254	271	Jul-16	73%	50.8%	11.5%
Term deposits	744	698	684	668	588	499	439	Jul-16	270%	-39.8%	-17.2%
Foreign currency deposits	19	18	20	21	22	21	21	Jul-16	527%	-27.1%	-2.6%
Total deposits of domestic resident sector *	1,236	1,188	1,168	1,177	1,160	1,159	1,157	Jul-16	163%	-2.2%	-0.6%

(*)Total ORS deposits do not match up with the data in Table 1 because the latter includes Asset transfer liabilities, Subordinated deposits, Repos and Hybrid instruments.

Source: Bank of Spain statistics bulletin

Table 7

Interest rates on loans (rates in % and variation in bps)

	2010	2011	2012	2013	2014	2015	2016	Date	Growth rate (bps)			
									03-'08	08 - latest	y-on-y	
Loans. Stock (NDER)												
Loans to households												
Housing loans	2.74	3.12	2.61	2.11	1.89	1.53	1.36	Jul-16	178	-429	-29	
Other loans to households	5.36	5.73	5.78	5.80	6.10	5.98	6.00	Jul-16	113	-107	3	
Loans to corporates and SMEs	3.31	3.90	3.47	3.44	2.84	2.38	2.12	Jul-16	204	-343	-45	
Loans. New lending transactions (APRC)												
Loans to households												
Housing loans	2.66	3.66	2.93	3.16	2.64	2.31	2.36	Jul-16	238	-347	-7	
Consumer loans	7.47	9.11	8.32	9.52	8.98	8.43	8.65	Jul-16	237	-235	-41	
Other	5.64	6.29	6.23	5.92	4.91	4.28	4.63	Jul-16	224	-241	-15	
Loans to corporates and SMEs (synthetic average)												
Less than €250,000	4.55	5.57	5.67	5.54	4.56	3.61	3.57	Jul-16	n.a.	-98	-54	
Between €250,000 and €1million)	3.89	4.79	4.27	4.03	2.91	2.20	2.07	Jul-16	n.a.	-182	-44	
Corporates (loans > €1mill.)	2.71	3.53	3.00	2.83	2.10	2.07	1.81	Jul-16	n.a.	-90	-21	

APR: Annual Percentage Rate; NDER: Narrowly Defined Effective Rate (APR excluding commissions)
 Source: Bank of Spain statistic bulletin

Table 8

Interest rates on deposits (rates in % and variation in bps)

	2010	2011	2012	2013	2014	2015	2016	Date	Growth rate (bps)			
									03-'08	08 - latest	y-on-y	
Deposits. Stock (NDER)												
Households deposits												
Sight deposits	0.27	0.28	0.21	0.22	0.17	0.12	0.08	Jul-16	6.5	-61	-7	
Term deposits	2.54	2.76	2.72	2.08	1.39	0.75	0.45	Jul-16	232	-396	-55	
Corporates and SMEs deposits												
Sight deposits	0.68	0.61	0.37	0.35	0.31	0.24	0.23	Jul-16	111	-154	2	
Term deposits	2.56	2.68	2.64	1.93	1.40	0.91	0.73	Jul-16	223	-365	-35	
Deposits. New transactions (NDER)												
Households deposits												
Sight deposits	0.27	0.28	0.21	0.22	0.17	0.12	0.08	Jul-16	30	-61	-7	
Term deposits	2.74	2.79	2.83	1.50	0.66	0.39	0.19	Jul-16	225	-399	-22	
Corporates and SMEs deposits												
Sight deposits	0.68	0.61	0.37	0.35	0.31	0.24	0.23	Jul-16	111	-154	2	
Term deposits	1.98	2.13	2.08	1.31	0.51	0.31	0.17	Jul-16	146	-330	-19	

NDER: Narrowly Defined Effective Rate (APR excluding commissions)
 Source: Bank of Spain statistics bulletin

Table 9

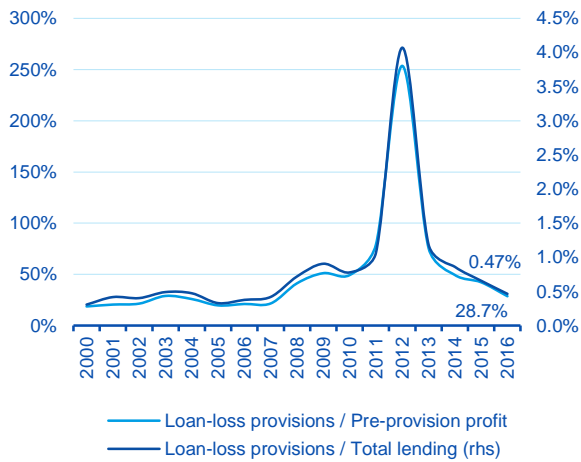
Key ratios

	2010	2011	2012	2013	2014	2015	2016	Date	Growth rate		
									00-'08	latest	y-on-y
Productivity											
Business volume* per branch (€000)	71,187	73,894	72,524	77,713	79,197	79,794	80,498	Jun-16	170%	21.7%	1.6%
Profit before tax per branch (€000)	227.3	-433.7	-2,278.8	123.0	407.3	345.2	446.4	Jun-16	77.5%	1.1%	0.5%
Efficiency											
Cost-to-Income ratio (Oper. expenses / Total revenue)	46.5%	49.8%	45.3%	48.2%	47.1%	51.0%	50.5%	Jun-16	-29.3%	13.6%	10.5%
Operating expenses / ATA	0.91%	0.86%	0.79%	0.83%	0.88%	0.93%	0.96%	Jun-16	-43.4%	0.0%	7.1%
Profitability											
RoE	5.2%	-7.4%	-35.5%	4.1%	4.9%	4.1%	5.3%	Jun-16	-3.4%	-48.4%	12.1%
RoA	0.30%	-0.52%	-2.55%	0.13%	0.44%	0.38%	0.49%	Jun-16	-23.6%	-25.2%	2.9%
NIM (Net interest rev. / ATA)	1.06%	0.89%	0.96%	0.83%	0.91%	0.93%	0.89%	Jun-16	-29.6%	-22.1%	-3.6%
Liquidity											
Loans-to-Deposits (resident sector)	149%	150%	137%	123%	119%	115%	111%	Jul-16	14.8%	-29.6%	-3.7%
Funding gap (Loans - Deposits, EUR bn)	607.9	594.4	436.8	270.9	220.1	168.3	130.1	Jul-16	349%	-81.1%	-28.0%
Funding gap / Total assets	18.7%	17.5%	12.8%	9.0%	7.6%	6.1%	4.8%	Jul-16	57.7%	-77.6%	-25.7%
Solvency and Asset Quality											
Leverage (Shareholders' equity / Total assets)	5.5%	6.5%	5.7%	7.7%	7.9%	8.2%	8.5%	Jul-16	-17.8%	52.1%	5.4%
Shareholders' equity / NPLs	166%	158%	117%	118%	133%	169%	192%	Jul-16	-74.3%	-32.9%	24.0%
Provisioning effort (Loan-loss prov. / Pre-provision profit)	49.3%	79.1%	253.6%	75.8%	49.5%	42.3%	28.7%	Jun-16	121%	-30.6%	-30.5%
Cost of Risk (Loan-loss provisions / total lending)	0.78%	1.06%	4.07%	1.19%	0.86%	0.66%	0.47%	Jun-16	134%	-35.4%	-38.8%
NPL ratio (resident sector)	5.8%	7.8%	10.4%	13.6%	12.5%	10.1%	9.4%	Jul-16	172%	178%	-14.0%
NPL coverage ratio (total)	66.9%	59.6%	73.8%	58.0%	58.1%	58.9%	59.0%	Jul-16	-58.2%	-16.6%	-2.2%
NPL coverage ratio (specific provisions)	39.6%	37.1%	44.7%	46.9%	46.7%	47.0%	46.8%	Jun-16	-39.0%	56.6%	-2.0%

(*) ORS loans plus ORS deposits

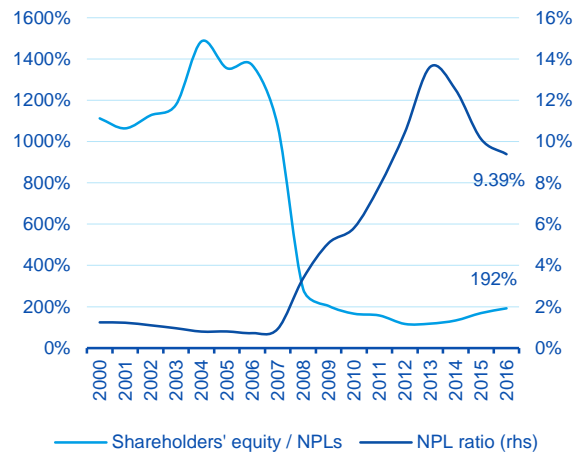
Source: Bank of Spain statistics bulletin

Figure A1.1
Provisions



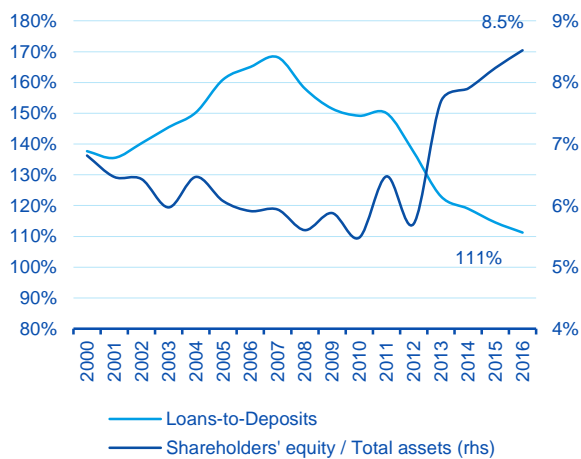
Source: BBVA Research

Figure A1.2
NPLs and Capital to NPLs



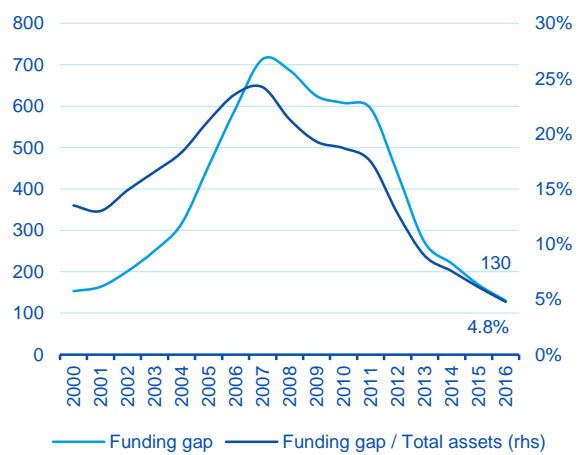
Source: BBVA Research

Figure A1.3
Liquidity and leverage



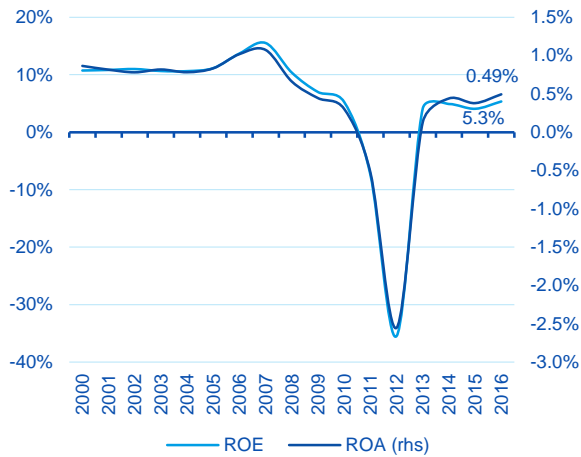
Source: BBVA Research

Figure A1.4
Funding gap (ORS loans – ORS deposits, EUR bn)



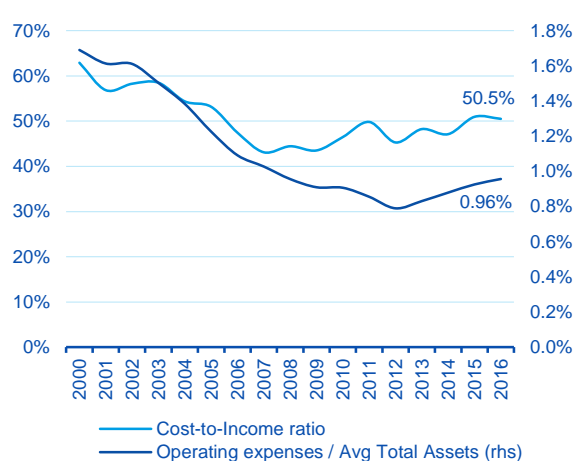
Source: BBVA Research

Figure A1.5
Profitability



Source: BBVA Research

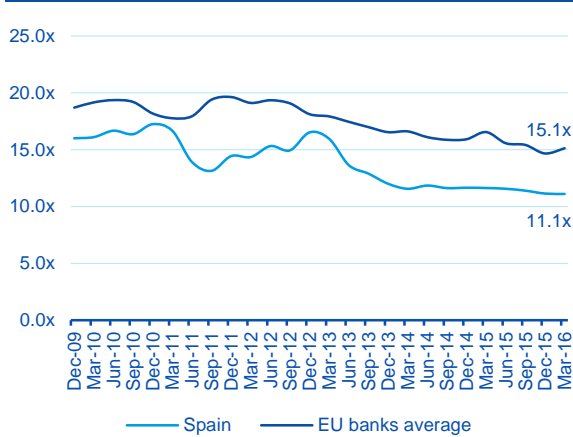
Figure A1.6
Efficiency



Source: BBVA Research

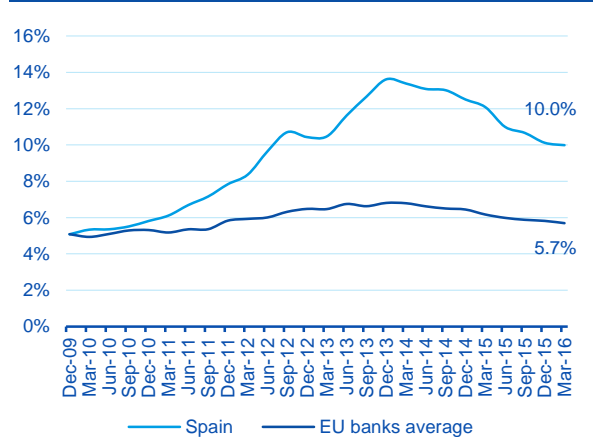
Annex 2: comparative analysis of the Spanish banking sector

Figure A2.1
Debt-to-Equity



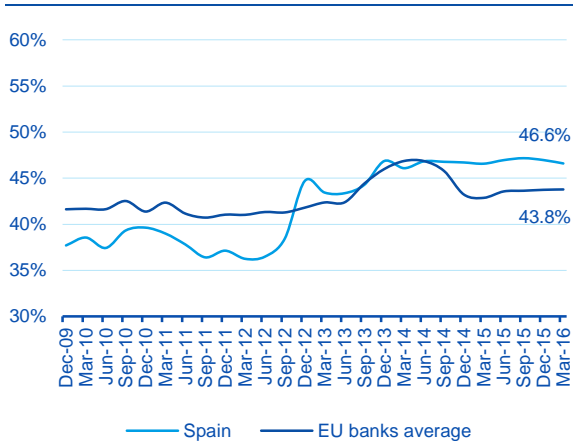
Source: EBA, BBVA Research

Figure A2.2
NPL ratio



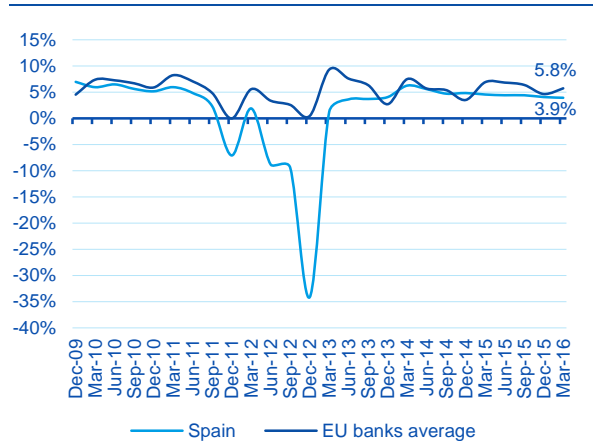
Source: EBA, BBVA Research

Figure A2.3
Coverage ratio



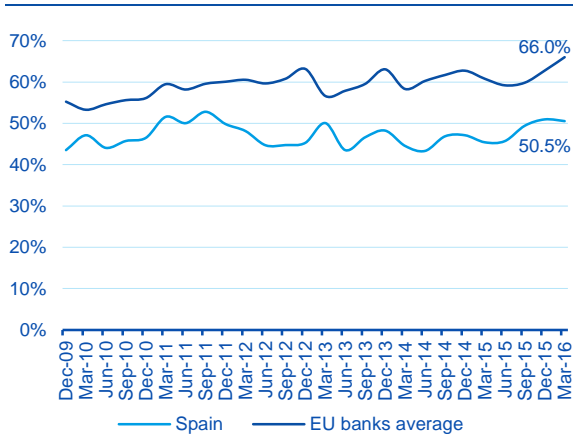
Source: EBA, BBVA Research

Figure A2.4
ROE



Source: EBA, BBVA Research

Figure A2.5
Cost-to-Income



Source: EBA, BBVA Research

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