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Banking Outlook

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Closing date: **30 june 2017**

Summary

1. Trends and developments in the Spanish banking sector

In the first quarter of 2017 the banking system posted net income of €3,514 million, the highest quarterly figure since 2009. Operating items followed the trend of the past few quarters, with revenues down slightly and costs well under control, while the 31% growth in net income for the quarter is explained by lower restructuring costs and provisioning, plus the reduced effective tax rate. New lending to SMEs and households (excluding mortgage loans) picked up in the first five months of 2017, in spite of which loan outstandings continued their downward trend. The NPL rate fell below 9% for the first time since 2012.

2. Portuguese banks in melancholy mood

Portugal's banks still have a reasonable liquidity position, but their dependence on external ratings is worrying. Their solvency is limited in terms of CET1, although they are above the European average when measured by the leverage ratio. Although in 2016 credit quality deteriorated, in the last quarter it improved, mainly due to the country's biggest bank's restructuring plan. According to the latest data from the EBA, among EU countries Portugal has the third biggest accumulated impaired exposure in its banks' balance sheets (16.4%), although coverage is increasing. Profitability has returned to negative territory and is expected to be weighed down by provisions.

3. Have European banks become more retail on the wake of the crisis?

In early 2017, retail banking activities represented 30% of EU banks' balance sheet due to the fact that the crisis triggered an increase in the orientation of banks towards their core banking activities. Driven by market forces and new regulation, retail deposits expanded from 22% of the balance sheet to almost 30%. Increases in the relative importance of retail loans in overall banking exposures were much more limited. At country level, there is a clear divide between the banks in Western European countries with a high prevalence of wholesale activities and the banks in emerging European countries with a clear retail orientation.

4. Net interest revenue and efficiency: the impact of the crisis on EU countries

On the wake of the financial crisis, European banks undertook an important restructuring effort. This process was steered by the reaction of investors and public authorities, which adopted new regulation and implemented an accommodative monetary policy. Despite the European harmonisation, idiosyncratic country factors led to a very different outcome across countries. Bank interest revenue was significantly eroded in peripheral countries while it was almost unaffected in core countries. Banks made an effort to improve efficiency, particularly in the less efficient banking systems. Overall, we observe a positive correlation between better efficiency and higher interest margins both before and after the crisis.

5. The impact of European banking consolidation on loan prices

The crisis has made obvious the fragility of some aspects of EMU, like financial fragmentation and the need of banking consolidation. Banks have merged due to the vulnerability of some players or in order to improve the profitability/efficiency of the sector. There is ample economic literature on the differences between banking concentration and competition, which proves that additional consolidation does not necessarily lead to reduced competition. According to our analysis, except in the case of credit to non-financial firms in Portugal, there is no evidence of concentration having affected competition, in the sense that it is not one of the determinants of credit interest rates.

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 Banco de España. The analysis of the Spanish banking sector is confined to banking business in Spain (important: see footnote on page[1]).

Results of the sector

- The system obtained post-tax net attributable income of €3,514 million in the first quarter of 2017 (up 31% YoY), the highest quarterly result since the end of 2009 (Table 2).

- However, this improvement came from below-the-line items. Revenues continued on their slightly downward trend. Total revenues fell by 1% relative to the first quarter of 2016. Net fees and commissions (up 7% YoY) was the only revenue item to grow, but this was not enough to offset the 3% decline in net interest revenue and the weak trading gains and other operating income. Net interest revenue slowed its decline relative to the past few quarters, despite the contraction in lending volumes and fixed income portfolios over the past twelve months. The reduction in deposit rates was slightly greater than the decline in the average lending rate, where we are already seeing an uptick in consumer credit prices.

- Costs remain under control, especially personnel expenses, which contracted by 3% in the quarter relative to the first three months of 2016. This reduction in costs led to an improvement in the cost/income ratio to 50.3% with the pre-provision profit being held practically stable.

- Loan-loss provisions increased by 2% relative to the first quarter of last year, but moderated relative to the fourth quarter of 2016, which saw a significant uptick due to three non-recurring factors: 1) the entry into force of Banco de España Circular 4/2016 partially adapting Spanish accounting to IFRS 9; 2) the ruling of the Court of Justice of the European Union on interest rate floor clauses in Spanish mortgage loan agreements; and 3) the restating of year-end accounts by a domestic credit institution.

- Net profits grew by 31%, basically due to: 1) lower provisioning and restructuring-related expenses in the first quarter of the year; and 2) the effective tax rate of 8% in the quarter, below the system's "normal" level (15% on average in the period 2000-2007), probably as a result of deferred tax assets being applied.

1: Throughout the document, "€ billion" refers to thousands of millions of euros.

Activity

- The banking system's total balance sheet continues to contract in 2017 (Table 1). With data to March, the reduction since the high of December 2012 is €800 billion (71% of current GDP). The weight of the banking balance sheet on GDP has fallen from 324% in 2012 to 233% in the first quarter of 2017. In the past twelve months the decline in total assets has been 4.2%. Additionally, the number of employees and branch offices in the system has also fallen, reducing over-capacity (Table 3).

- Despite the contraction in total lending (analysed later in more detail), the system's asset structure has changed during the crisis. The weight of credit has fallen from 70% in 2008 to 59% in 2017, while that of fixed income and equity portfolios has increased from 15% to 23% in the same period, despite falling in 2016 and the first quarter of 2017 (Table 1). The evolution of the sovereign debt portfolio, with growth of 123% since 2008, is especially noteworthy although during the 12 months to March 2017 it declined by 14.6%. In the absence of profitable investment alternatives, the banking system substantially increased its holdings of public debt in the crisis.

- The system's liabilities remained more stable. Deposits (current accounts, savings accounts and term deposits, Table 6) held steady at practically the same level as in March last year once the most volatile items are deducted. Nevertheless, we see a significant shift from term deposits to savings and sight deposits due to the low returns on the former and households' preference for liquidity. As shown in Table 8, interest rate on term deposits are at practically the same level as those on sight deposits.

- Spanish banks' debt continue to decline (Table 1). Since 2008 bonds and notes have fallen by 52% (and by 13% from March 2016 to March 2017), in line with the contraction of the funding gap (loans minus deposits, Table 9) due to the deleveraging of the system. Liquidity provided by the ECB showed an uptick in the first few months of 2017 following the TLTRO auctions (up 36% YoY to May), although remaining well below the peak of 2012. Since the last TLTRO auction has now taken place, no further significant increases in this item are expected.

- Capital on-balance sheet (Table 1) remains stable since 2013, having increased by 27% or €48 billion since 2008.

Spotlight on lending and NPLs

- With data to March 2017 all lending portfolios continued their downward trend (Table 4), with the exception of non-mortgage lending to households, which was up by 2.7% YoY. Total lending to the private sector ("Other Resident Sectors" in Banco de España's classification, hereinafter "ORS") was down by 2% relative to March 2016, with a cumulative decline of 32% since 2008 (€604 billion, 54% of GDP). The moderation in the declines could be an indication that we are nearing the end of deleveraging. The portfolio with the sharpest fall is lending to real estate, with a YoY decline of 8% (down by 66% from its 2008 high). This item now represents just 12% of total loans outstanding, but still accounts for 35% of non-performing loans.

- NPL volumes in the system continue to decline significantly. Total NPLs have come down by 13.5% in the past twelve months, with a cumulative decline of €85 billion or 43% since the highs of 2013, making 40 consecutive months of reduction with the sole exception of November 2016. The reduction in NPL volumes is greater (18% YoY) in lending to businesses than in lending to households (-0.6% YoY), where the reduction in mortgage NPLs (-3.7%) is offset by the 6.4% increase in NPLs in other lending to households. The NPL rate fell below 9% for the first time since mid-2012.

- The cumulative volume of new lending transactions YTD May 2017 (Table 5) is slightly up on the first five months of last year. By portfolios, lending to SMEs and other (non-mortgage) lending to households were both up, while mortgage lending and lending to large corporates were down in the first five months of 2017. In the case of mortgage lending, this is because renegotiations of loans with interest rate floor clauses gave rise to a large volume of new transactions in the same period of last year. At present the annualized volume of new lending is running at 34% of the average for the three years preceding the onset of the crisis.

Main ratios

- The cost/income ratio improved to 50.3% in the first quarter of 2017, thanks to cost control and to a notable increase in the system's productivity (business volumes and pre-tax profit per branch, Table 9). Operating costs as a percentage of Average Total Assets (ATM) have been held below 1% since 2008 (Figure 6, Appendix 1).

- The system continues to strengthen its solvency position. The volume of capital and reserves reached 8.7% of total assets (Figure 3, Appendix 1), and the amount of equity on balance sheet doubled the amount of NPLs in the system, reaching 205% in March 2017 (Figure 2, Appendix 1).

- Liquidity does not currently pose a problem for the Spanish banking system. The ratio of ORS lending to ORS deposits was steady at 110% as at March 2017, 48 pp less than in 2008 (Figure 3, Appendix 1). The sector's funding gap (ORS lending less ORS deposits) stood at €114 billion (4.0% of the balance sheet), the minimum level of the series (Figure 4, Appendix 1).

- The system maintains satisfactory levels of provisions. The "provisioning effort" (loan-loss provisions / pre-provision profit) and the "cost of risk" (loan-loss provisions / average total lending), have held steady at pre-crisis levels (Figure 1, Appendix 1). Profitability remains positive, although weak (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 from December 2016.

- Spanish banks have better cost/income ratios and have more capital on balance sheet than their European competitors (Figure 1, Appendix 2). Specifically, they have 35% more capital (+17% in December 2009, the first EBA data available) and a cost/income ratio 11 pp better than the average for European banks (Figure 5, Appendix 2).

- The balance sheet clean-up efforts made by Spanish banks in 2012 and 2013 (Figure 3, Appendix 2) were necessary to show the fair value of their assets and to get into line with their European competitors. Thus NPL specific provision coverage has exceeded the European average since the beginning of 2014.

- On the other hand the NPL ratio remains higher in Spain than in other countries (Figure 2, Appendix 2), although the volume of NPLs has fallen continuously since December 2013. The system's profitability is slightly below the European average (Figure 4, Appendix 2).

2. Portuguese banks in melancholy mood

Liquidity heavily dependent on the decision of DBRS

Since the beginning of the Economic Assistance Programme in June 2012, when recourse to the ECB reached its peak of €60 billion, Portuguese banks have reduced their reliance to around €25 billion in the first few months of 2017. This level (3.0% of the total of the Eurosystem) is way above the Portuguese central bank's capital key of 1.7%, but has improved appreciably since the worst moments of the crisis (10% of the total of the Eurosystem). In Portugal, short-term transactions (MROs) account for nearly 6% of ECB financing (almost negligible in Spain), and the banks used the last TLTRO II auction to replace this short-term financing with longer-term and cheaper funding.

With this measure the uncertainty about the sovereign debt rating is partly dispelled: **DBRS is the only rating agency to maintain Portugal's long-term sovereign debt at investment grade**, a decision which it confirmed on 21 April. If the rating had been downgraded, the liquidity obtained with Portuguese sovereign debt as collateral would have had to be replaced by ELA, (emergency liquidity assistance), which would have increased financing costs and impaired the banks' reputations. A rating downgrade by DBRS would also have affected purchases of public debt under the Public Sector Purchase Programme (PSPP), since the ECB would have stopped buying Portuguese public debt. In the past few months the rate of purchases of Portuguese debt has slowed due to their being close to the ECB's 33% limit on holdings of a single issuer.

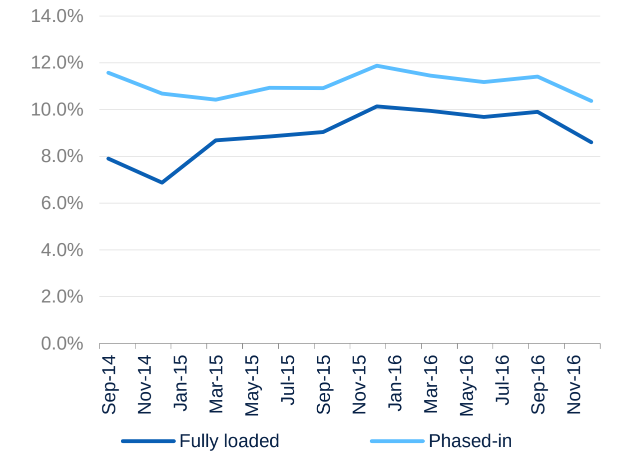
Additionally, the banking system in aggregate has had a loan-to-deposits ratio of less than 90% since the end of 2016, due to substantial deleveraging (since mid-2012 credit has declined at 5.3% year-on-year) and the increase in deposits since the end of 2015. Lastly, according to EBA data[2], the Liquidity Coverage Ratio (LCR) of Portugal's banking system in December 2016, at 146.4%, was similar to that of Spain (147.9%) or the UK (146.5%) and above the average for the European Union (141.1%).

Solvency

According to the EBA, the Portuguese and Italian financial systems are those with the lowest CET1 phase-in ratios (10.4% at the end of 2016), and Portugal's fully-loaded CET1 is the lowest (8.6%). Both ratios fell significantly during 2016: by 151 and 153 bps respectively. Much of this adjustment was concentrated in the last quarter of 2016, due to a number of corporate transactions and very adverse results, affected by low interest rates and higher provisioning. During the first quarter of 2017 there were some corporate movements which increased the amount of capital in banks' balance sheets. This weak solvency situation is partly caused by a higher density of risk-weighted assets than that of other countries in the region. Thus solvency measured by the fully-loaded leverage ratio is similar to Spain's and better than the European average.

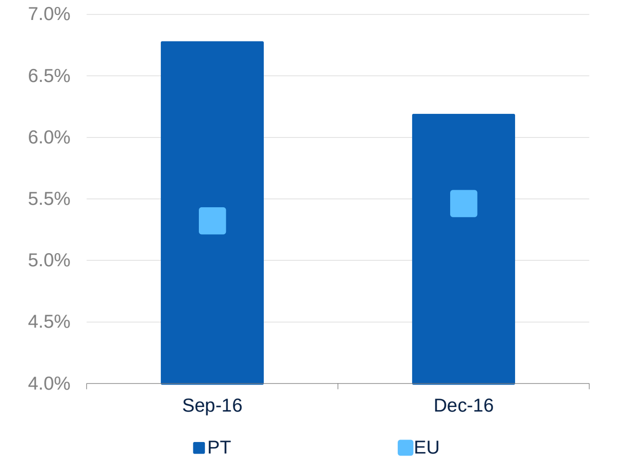
2: All EBA data used in this report are from the latest publication of the Risk Dashboard (4Q2016).

Figure 1 Common Equity Tier 1, CET1 (%)



Source: BBVA Research and EBA

Figure 2 Fully-loaded leverage ratio (%)



Source: BBVA Research and EBA

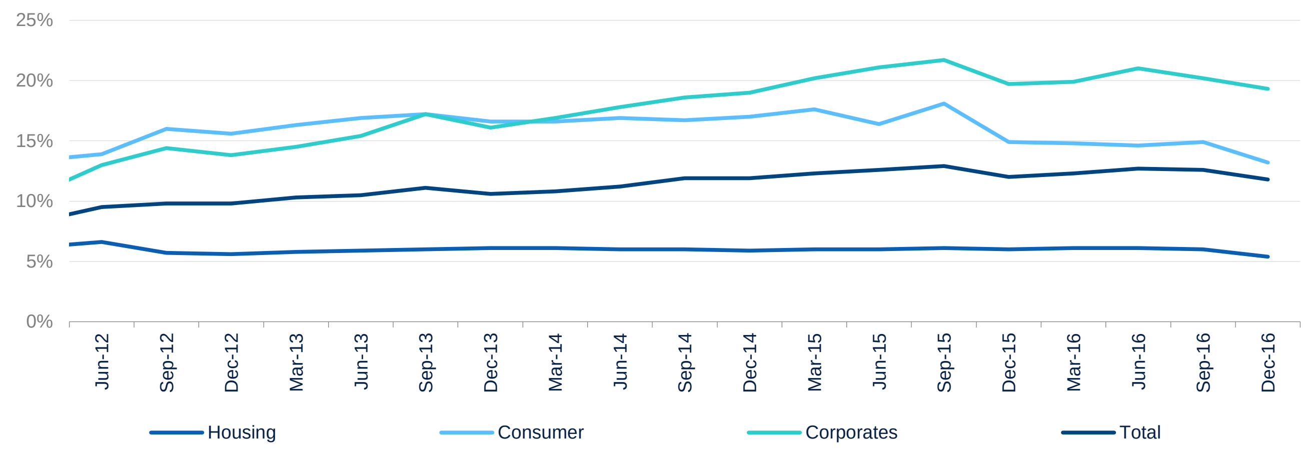
Lending and credit quality

Since 2012 lending to the resident private sector has fallen at an average year-on-year rate of more than 5%, and shows no signs of recovery. Deleveraging is concentrated in lending to businesses and loans to households for home purchase, whereas lending to households for other purposes (consumer and other) has shown year-on-year growth of more than 10% since October of last year. The decline in lending for home purchase and the adjustment in interest rates have notably lightened Portuguese households' financial burden, from an aggregate peak of 14.4% of gross disposable income (GDI) in 2009 to 8.8% in December 2016.

Since 2011 all the credit quality indicators[3] of Portuguese banks have deteriorated. For example "credit at risk" (*crédito em risco*) increased in the first two quarters of 2016, holding steady in the third and falling in the fourth quarter to 11.8%, in line with the levels of one year earlier. The fall in the last quarter of last year was generalised across all portfolios (Figure 3). Coverage has improved since mid-2012, going from 50.5% in June 2012 to 69.0% at the end of 2016, following a fourth quarter (+320 bps) heavily influenced by the restructuring of Caixa Geral. According to the latest data published by the EBA, among EU countries Portugal has the third biggest accumulated impaired exposure in its banks' balance sheets (16.4%), just ahead of Italy with 12.6%, and far ahead of Spain with 4.9%. Despite this, it still has a comparable coverage ratio (43.6%), similar to Spain's (43.7%) and slightly below the European average of 44.6%.

3: Portugal's central bank replaced the past-due credit metric with "credit at risk", which is a broader concept and includes a stricter definition of refinanced assets. Furthermore, the EBA publishes the NPL ratio with the comparable supervisory definition at consolidated level.

Figure 3 NPL ratio by portfolios (*crédito em risco*, %)



Source: BBVA Research and Banco de Portugal

Profitability

Portuguese banks' profitability remains badly impaired as a combined result of a number of factors which have persisted for several years: 1) a depressed level of lending activity; 2) an environment of low interest rates; 3) badly impaired credit quality and 4) heavy provisioning. The deterioration in profitability is confirmed by Banco de Portugal data: ROE for 2016 turned negative again (-8.0%), following what had seemed like a recovery in 2015.

Part of the deterioration seen in profitability on the domestic front is offset by the consolidated groups' international activity. Since 2007 international activity has contributed on average 24% of net interest revenue and total revenues.

In the next few quarters, part of the improvement in profitability will have to come from further adjustment of installed capacity. Taking the Spanish case as an example, efforts must concentrate on personnel expenses, where there should be a margin for reducing the number of employees by a further 13%, compared with the 16% achieved in the past eight years, which will lead to improved efficiency of the system.

All in all, the Portuguese banking systems has not recovered yet from the crisis and faces a gloomy future. In this sense, banks must make additional efforts to clean-up and restructure in order to be prepared to support economic growth.

3. Have European banks become more retail on the wake of the crisis?

Depending on the relative importance of retail and trading activities the business models of banks are usually classified from the extreme of pure commercial banking to the extreme of pure investment banking with a spectrum of different degrees of universal banking in between.

Commercial banking activities are regarded as particularly important for the real economy because they encompass functions such as maturity and liquidity transformation, risk assessment, asset allocation and support of the payment system. Commercial banking activities need the support of a series of "wholesale" activities (e.g. liquidity management). Moreover, banks also provide services to other parts of the economy (e.g. pension funds).

In the euro area, the bulk of banks' balance sheets (about 70%) comprises non-retail loans and non-retail deposits (e.g. interbank loans and deposits, loans and deposits from insurance corporations and pension funds and loans and deposits from non-residents) and other wholesale and investment activities (e.g. holdings of securities, hedging services, issuance of bonds) (Table 1).

Table 1 Breakdown of loans and depòsits, euro zone banks

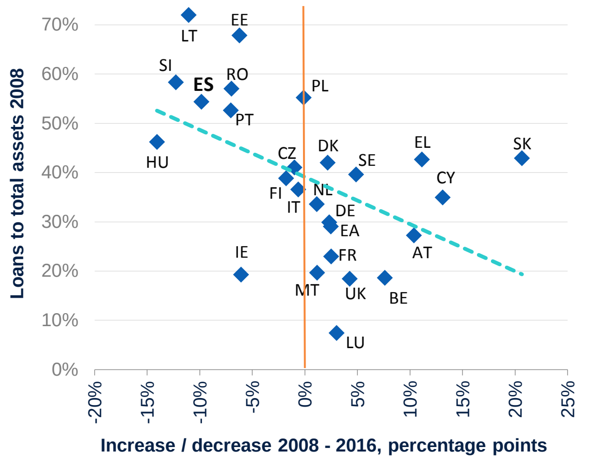
	Total loans / deposits			Retail loans / deposits			Other loans / deposits		
€ billion	**2008**	**2012**	**2016**	**2008**	**2012**	**2016**	**2008**	**2012**	**2016**
Loans	18,100	18,000	17,600	9,200	9,600	9,800	8,900	8,400	7,800
Deposits	16,700	17,200	17,000	6,900	7,900	9,100	9,800	9,300	7,900
	Total loans / deposits			**Retail loans / deposits**			**Other loans / deposits**		
% of total assets	**2008**	**2012**	**2016**	**2008**	**2012**	**2016**	**2008**	**2012**	**2016**
Loans	56.9%	55.1%	56.8%	28.9%	29.4%	31.6%	28.0%	25.7%	25.2%
Deposits	52.5%	52.7%	54.9%	21.7%	24.2%	29.4%	30.8%	28.5%	25.5%

Notes: Analysis based on domestic, non-consolidated assets.
Source: ECB and BBVA Research

At country level, a clear divide remains between emerging European countries, where retail loans and deposits represent more than 50% of total assets, and Western European countries, where retail loans and deposits represent less than 30% of total assets.

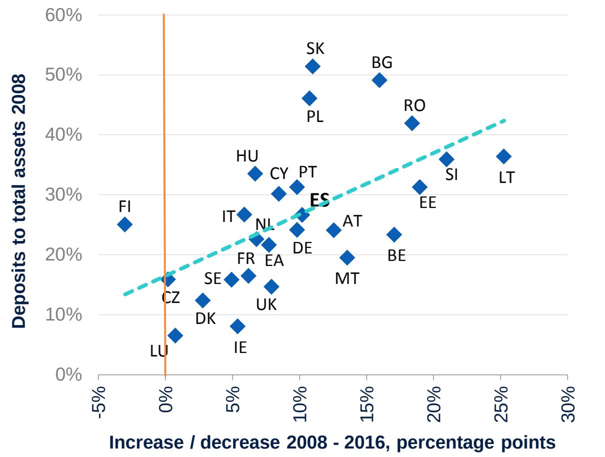
The outbreak of an unprecedented financial crisis and the heavy burden imposed on taxpayers, revealed that, over time, many large universal banks shifted too many resources to trading books, supported by cheap funding. Market forces and some regulatory reforms entailed a reassessment of risks and encouraged a shift towards more retail activities, mainly from the funding side.

Figure 1 Retail loans in 2008 and evolution up to 2016



Note: Analysis based on domestic assets (non-consolidated). Retail loans include all loans to households and non-financial corporations
Source: ECB and BBVA Research

Figure 2 Retail deposits in 2008 and evolution up to 2016



Note: Analysis based on domestic assets (non-consolidated). Retail loans include all loans to households and non-financial corporations
Source: ECB and BBVA Research

Indeed, the squeeze in interbank lending and other wholesale sources of funding, new regulation requiring liquidity buffers and changes in investors' preferences pushed banks to increase retail deposits as a source of funding for their activities. Retail deposits increased in virtually all countries, with the banking system with an already important retail orientation becoming even more retail (Figure 2). This increase in retail deposits implies a substantial shift in the sources of funding used by banks and, to a certain extent, in the own nature of EU banks.

The evolution of retail loans was more mixed. A slowdown in economic activity and the pressure on banks, households and non-financial corporations to deleverage limited the demand for new loans. Such pressure to deleverage was stronger in countries with a larger proportion of retail loans and, therefore, loans declined over the crisis. In the banking systems with the smallest proportion of retail loans, retail loans tended to expand over the crisis (Figure 1).

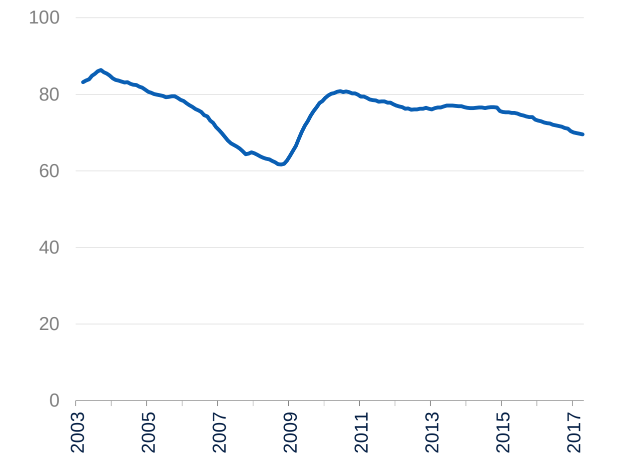
4 Net interest revenue and efficiency: the impact of the crisis on EU countries

The financial crisis triggered a restructuring of the banking systems across EU countries which has impacted banking business. Both revenues and expenses have been affected. Structural factors in each country such as the asset and liability mixes and how monetary policy is transmitted in terms of prices and volumes have been important determinants of the impact on interest margins and administrative costs of restructuring measures.

The expansionary monetary policy implemented on the wake of the crisis led to a reduction in both interest revenues and interest expenses. Given the downwards rigidities of deposits, the spread between lending and deposit rates (i.e. the price effect) has continuously and significantly contracted. This has contributed to the extensive debate about the low profitability of banks (and of financial institutions in general), which can lead to increases in the prices for some services or can, if protracted for too long, put into risk the viability of some institutions.

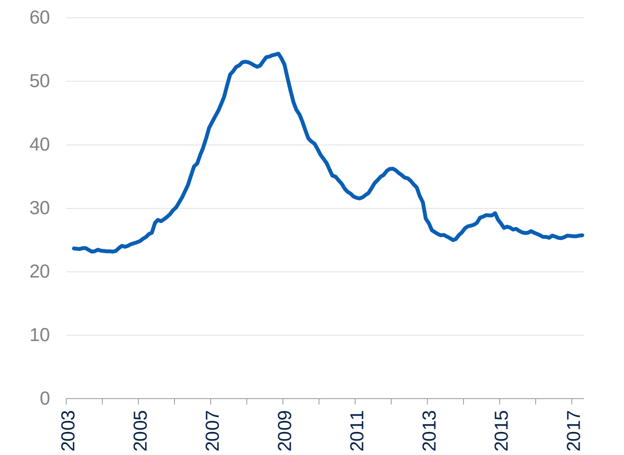
Despite the single monetary policy of the euro area, the transmission has been more complete in some countries than in others or achieved with certain lags. A series of idiosyncratic country factors limit the transmission of monetary policy and, therefore, influence the level of retail rates across countries and over time. Consequently, significant differences in the level of interest rates for loans and deposits, and the spread between both, are observed across euro area countries.

Figure 1 Interest margins, Germany, € billion, annual



Note: The interest margin refers to retail activities and is calculated as the loan volumes times the loan-deposit spread.
Source: ECB and BBVA Research

Figure 2 Interest margins, Spain, € billion, annual



Note: The interest margin refers to retail activities and is calculated as the loan volumes times the loan-deposit spread.
Source: ECB and BBVA Research

With the expansionary policy, monetary authorities seek at expanding the volume of credit. However, such an impact is not straight forward and the evolution of volumes may or may not compensate for the decline in rates as reflected in the evolution of interest margins across countries.

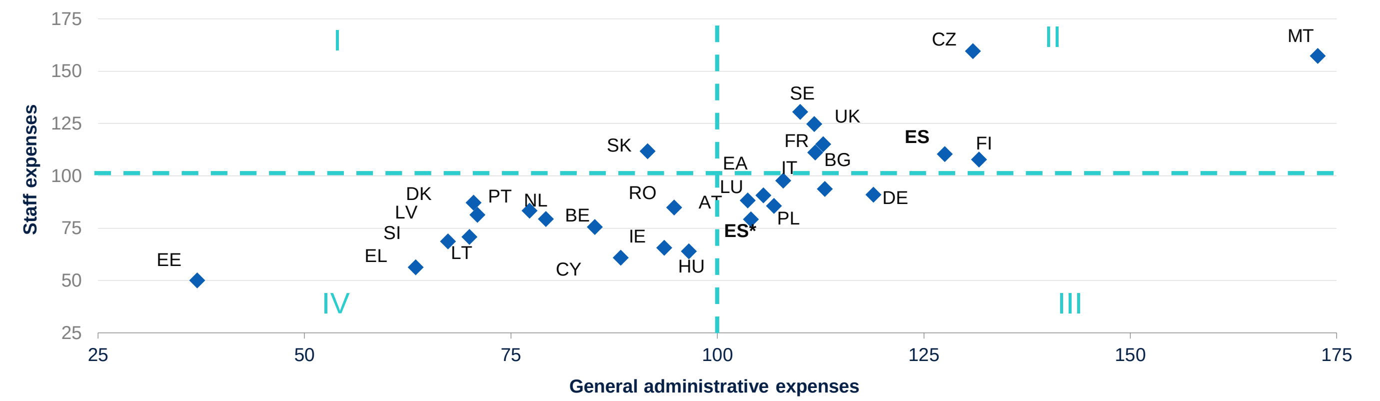
In a number of (mainly core) countries, interest margins have remained rather stable throughout the crisis, although they might have slightly decreased in the last couple of years. This was the case in Germany, where banks were obtaining an interest margin of about €80 billion a year (Figure 1), Belgium and Austria. In the Netherlands, the interest margin generated by banks even increased over the crisis.

In other (mainly peripheral) countries, interest margins plummeted. This was the case in Spain, where interest margins dropped from €50 billion a year to less than €30 billion a year (Figure 2), Italy, Ireland and Portugal. In general, these countries had significantly expanded their lending portfolio in the run up to the crisis.

In a majority of EU countries, staff expenses decreased over the crisis; however, in a few others, staff cost increased, sometimes significantly.

The evolution of general expenses is more mixed (Figure 3). In half of the countries, the outbreak of the crisis led to a rationalisation of general expenses with the largest reductions in costs observed in the countries more impacted by the crisis (e.g. Portugal, Latvia, Greece and Slovenia), as they were required to implement an adjustment program, which included a restructuring and rationalisation of their banking systems[4]. Banks in Lithuania and Estonia also show significant improvements in their general administrative expenses probably linked to the preparations and adoption of the euro.

Figure 3 Evolution of administrative expenses between 2008 and 2015, Index: 2008 =100



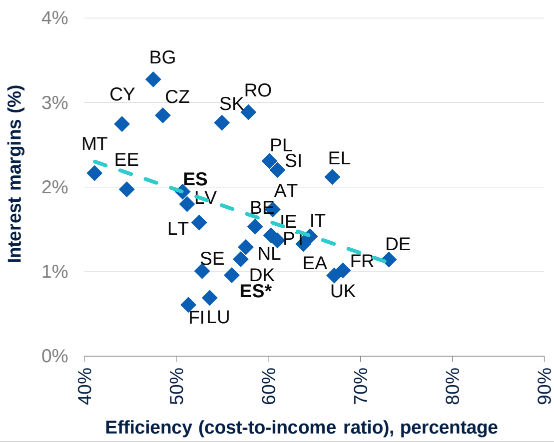
Note: Analysis based on consolidated banking data for domestic banks and subsidiaries and branches of foreign banks. Data include only FINREP (IFRS+GAAP) reporting banks. For Spain, the char includes both consolidated data (ES) and domestic business in Spain (ES*). Data for Lithuania and Czech Republic are for 2014.
Source: ECB and BBVA Research

In the other half of countries, we can observe an increase in general administrative expenses throughout the crisis (particularly in Malta, Finland, the Czech Republic, Spain -although much less for the domestic business- and Germany). It is important to highlight that general administrative costs may temporary increase because of transitional effects driven by the process of restructuring of the banking systems. For instance, closing a branch may entail a penalty if the lease is terminated earlier than what was initially foreseen in the contract.

4: Slovenia, although it did eventually not apply for external support, implemented a series of preventive measures.

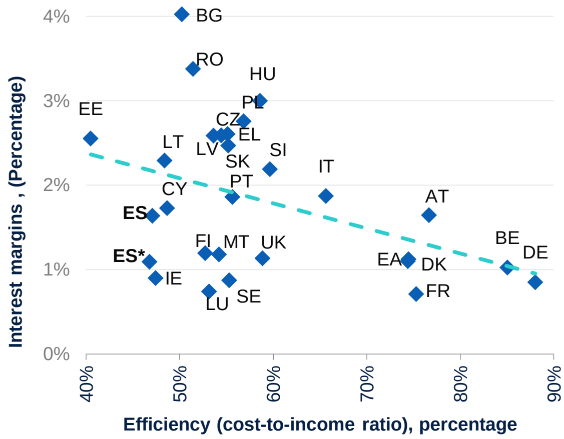
Given the evolution of income and expenses, we observe a compression in the distribution of countries in terms of their efficiency, as the ones with the lowest efficiency (e.g. Germany, Denmark, Austria France and Belgium) have significantly improved their cost-to-income ratios. The positive correlation between efficiency and better interest margins holds both in 2008 and in 2015 (Figures 4 and 5). Moreover, over the crisis, improvements in efficiency (lower CTI ratios) tended to lead to higher interest margins while reductions in efficiency (higher CTI ratios) tended to be accompanied with a deterioration in interest margins.

Figure 4 Efficiency and interest margins, 2008



based on consolidated data. Outliers are excluded from the analysis: the Netherlands, with a CTI of 186% in 2008; and Hungary, with a CTI of 83% and an interest margin of 3.4% in 2015. Data for Croatia are not available..
Source: ECB and BBVA Research

Figure 5 Efficiency and interest margins, 2015



Note: Interest margin: net interest income over total assets. Analysis based on consolidated data. Outliers are excluded from the analysis: the Netherlands, with a CTI of 186% in 2008; and Hungary, with a CTI of 83% and an interest margin of 3.4% in 2015. Data for Croatia are not available.
Source: ECB and BBVA Research

5 The impact of European banking consolidation on loan prices

The recent financial crisis highlighted important vulnerabilities of the EMU that resulted in the fragmentation of the European financial markets and the increased consolidation of European banking systems. The crisis increased the uncertainty on the actual situation of the economies and banks. International wholesale market transactions dropped, interbank market activity halted, the use of foreign collateral declined and a sovereign-banking risk loop emerged. When the crisis started financial markets started to work as a plethora of national markets. This trend inverted only after the ECB committed to do “whatever it takes” to preserve the euro on August 2012. As for banking consolidation, the crisis forced banks to merge as a result of some players’ vulnerability. In other cases, low profitability and efficiency pushed banks to search for synergies via M&A.

The key question is whether the increase in concentration has been large enough to affect credit price formation. According to economic literature a Herfindahl Index below 1000 signals a highly competitive market. Portugal is the only country in our sample with an index above 1000. In order to check this hypothesis, a concentration measure will be introduced as one of the determinants of credit interest rates in Spain, France, Italy and Portugal, to see whether it turns to be significant and has a positive coefficient.

The determinants of credit interest rates

Lending rates in the EMU are affected by a variety of factors: a) the risk-free interest rate; b) the funding cost, linked to the marginal cost of funding and the sovereign risk; c) credit risk calculation; d) operational risk; e) fees and commissions; and f) the commercial margin.

As series synthesizing all these factors are not available, we used monthly data since 2003 to estimate the relationship between the interest rates[5] of new lending operations to SMEs (using loans of less than 1 million euros as a proxy) and corporates (loans of more than 1 million euros) in the main EMU peripheral countries (Spain, Italy and Portugal) and one core country (France) using: 1) the official ECB rate; 2) the spread between Euribor and the official rate; 3) the spread between the interest rate on government debt in the theoretical monetary union and Euribor; 4) the spread between the debt of the theoretical monetary union and each country’s sovereign debt; and 5) firms’ default rate.

Our findings show that the decline in financial fragmentation (particularly country risk) translated into lower prices in all loan portfolios, although in a delayed, partial and heterogeneous way. While financial fragmentation started decreasing by mid-2012, firms’ credit interest rates in peripheral countries only started falling by mid-2014, in line with

5: See “Determinantes de los tipos de interés de las carteras de crédito en la Eurozona” Doc. Trabajo 16/11 junio 2016. José Félix Izquierdo: https://www.bbvaresearch.com/publicaciones/determinantes-de-los-tipos-de-interes-de-las-carteras-de-credito-en-la-eurozona/

the ECB quantitative easing program and TLTRO liquidity auctions. Portugal is a special case, as the government asked for an international rescue in May 2011 and the maximum interest rates were registered by end-2011 or the start of 2012. In Portugal loan rates have been higher than in the rest of the analyzed countries by more than 100 basis points throughout 2003-2016.

Our analysis shows that divergences between countries are related to national factors, which outweigh international trends. There are still differences between SME loan prices in peripheral and core countries, and smaller differences in the case of corporates (which have alternative funding sources to bank credit and operate internationally).

As expected, credit risk has an important effect in Spain, Italy and Portugal, but not in France. The effect is bigger in the case of lending to corporates than to SMEs in Spain and Italy. It is also interesting that changes in the default rate affect loan rates with a lag of 2 months in Italy and Portugal, and a lag of 3-4 months in Spain, so Spanish banks take more time to transfer credit risk changes to loan prices.

The impact of concentration on loan rates

We estimated the models again, but this time including concentration[6] as another determinant of firms' new credit interest rates. A positive coefficient would indicate that concentration as high as to affect the way in which credit prices are formed, and therefore it is altering competition. The exercise has been repeated using differing measures of concentration, but results did not vary in a significant way

As shown in table 1, concentration was not significant for the formation of corporate or SME credit rates in Spain. In the case of SME lending in France and Italy, concentration seems to have an influence as the coefficient is significant, but its sign is negative (more concentration leads to lower interest rates), so these results have been discharged. The only case in which concentration has the expected sign (positive) and it is significant is Portugal, both for SMEs and corporate loans, and using different measures of concentration (Herfindahl index or market share of the five largest entities, although the fit is better using Herfindahl). Therefore, the high banking concentration is having a negative influence on the formation of loan prices in Portugal, as they are higher than what they would be with lower concentration levels. Concentration has been high in Portugal for a protracted period, and that explains to a significant degree firms' credit interest rates

6: To ensure the homogeneity of the concentration indicators we have only used the two provided by the ECB: Herfindahl Index and the market share of five largest banks. The concentration indices have been interpolated monthly.

Table 1 Estimated banking concentration multiplier on firms interest rates: sign and significativeness

Firms interest rate	Spain	France	Italy	Portugal
Herfindahl Index				
Up to 1 mn EUR	- Not Signif	- Signif	- Signif	+ Signif
Above 1 mn EUR	- Not Signif	- Not Signif	- Not Signif	+ Signif
Market share of 5 banks				
Up to 1 mn EUR	- Not Signif	- Signif	- Signif	+ Signif
Above 1 mn EUR	- Not Signif	- Not Signif	- Not Signif	+ Signif

Source: BBVA Research based on ECB, BoF, BoI, BoP, BoS and Bloomberg

To conclude, according to our analysis except in the case of credit to non-financial firms in Portugal there is no evidence of concentration having affected competition, as it is not one of the determinants of new credit to firms' interest rates. Therefore, there is no evidence of a direct relationship between consolidation and competition and other forces may be impacting competition (institutional framework, contestability…).

Appendix 1: Main indicators for monitoring the Spanish banking system

Table 1 Summary Balance of the banking system. € bn and % variation

									Growth rate		
Assets	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**Date**	**00-'08**	**08-latest**	**y-on-y**
Total lending	2,106	1,951	1,716	1,651	1,603	1,556	1,555	Mar-17	217%	-28.5%	-1.2%
Public corporations	*90*	*114*	*87*	*101*	*90*	*88*	*88*	Mar-17	*69%*	*65.9%*	*-7.9%*
Domestic resident sector	*1,783*	*1,605*	*1,448*	*1,380*	*1,327*	*1,276*	*1,266*	Mar-17	*234%*	*-32.3%*	*-2.1%*
Non residents	*234*	*232*	*180*	*169*	*186*	*191*	*201*	Mar-17	*164%*	*-20.6%*	*9.0%*
Fixed income securities and equity stakes	656	766	773	754	662	610	612	Mar-17	132%	23.1%	-8.5%
Fixed income securities	*406*	*509*	*493*	*492*	*415*	*366*	*366*	Mar-17	*135%*	*12.3%*	*-13.8%*
Of which: sovereign debt	*198*	*247*	*264*	*288*	*251*	*225*	*224*	Mar-17	*6%*	*123%*	*-14.6%*
Equity	*251*	*258*	*280*	*262*	*246*	*244*	*247*	Mar-17	*128%*	*43.5%*	*0.6%*
Interbank lending	251	279	211	155	164	163	152	Mar-17	81%	-42.1%	-3.9%
Other assets (net of interbank lending/deposits)	387	426	326	354	331	319	304	Mar-17	230%	6.1%	-10.0%
Total assets	**3,400**	**3,423**	**3,026**	**2,913**	**2,760**	**2,647**	**2,624**	**mar-17**	**184%**	**-18.6%**	**-4.2%**
Liabilities and Shareholders' Equity											
Customer deposits	1,934	1,725	1,684	1,686	1,637	1,578	1,562	Mar-17	169%	-22.4%	-3.9%
Public corporations	*70*	*69*	*63*	*76*	*77*	*54*	*50*	Mar-17	*263%*	*-34.8%*	*-28.7%*
Domestic resident sector	*1,373*	*1,317*	*1,314*	*1,289*	*1,261*	*1,243*	*1,233*	Mar-17	*192%*	*-13.9%*	*-0.9%*
Non residents	*492*	*339*	*306*	*320*	*299*	*281*	*279*	Mar-17	*113%*	*-44.7%*	*-10.5%*
Interbank deposits	373	573	381	312	303	288	311	Mar-17	95%	-1.2%	3.6%
Pro memoria: net interbank position	*122*	*294*	*171*	*157*	*139*	*125*	*159*	Mar-17	*215%*	*206%*	*11.9%*
Debt issued	435	394	297	249	225	201	188	Mar-17	625%	-52.5%	-10.9%
Other liabilities	439	535	430	436	368	352	335	Mar-17	253%	4.7%	-11.0%
Shareholders' equity	220	195	233	230	227	227	229	Mar-17	134%	26.7%	1.1%
Pro memoria: ECB funding	*132*	*357*	*207*	*142*	*133*	*140*	*173*	*May-17*	*566%*	*87%*	*36.2%*
Total Liabilities and Shareholders' Equity	**3,400**	**3,423**	**3,026**	**2,913**	**2,760**	**2,647**	**2,624**	**mar-17**	**184%**	**-18.6%**	**-4.2%**

(*) Includes ORS credit, credit to the Public Administration and credit to non-residents
(**) Includes ORS deposits, deposits by the Public Administration and deposits by non-residents
Source: Statistical Bulletin of the Bank of Spain

Table 2 Summarized balance sheet of the banking system. Cumulative annual earnings € mn and % change

	2011	2012	2013	2014	2015	2016	2017	Date	Growth rate 00-'08	08-latest	y-on-y
Net interest revenue	29,565	32,739	26,816	27,118	26,410	24,296	5,908	Mar-17	92%	-32.8%	-3.2%
Net fees and commissions	11,750	11,275	10,931	11,257	11,237	11,059	2,913	Mar-17	79%	-10.6%	6.9%
Trading gains and other revenue	15,811	15,493	17,797	17,043	13,885	13,085	3,967	Mar-17	276%	-12.8%	-3.0%
Total revenue	**57,126**	**59,507**	**55,544**	**55,418**	**51,532**	**48,440**	**12,788**	**Mar-17**	**118%**	**-22.9%**	**-1.0%**
Operating expenses	-28,464	-26,951	-26,798	-26,116	-26,261	-26,388	-6,426	Mar-17	54%	-12.9%	-1.6%
Personnel expenses	-16,889	-15,587	-15,108	-14,329	-14,182	-13,943	-3,400	Mar-17	54%	-24.0%	-2.7%
Other operating expenses	-11,574	-11,364	-11,690	-11,787	-12,079	-12,445	-3,026	Mar-17	54%	4.3%	-0.3%
Pre-provision profit	**28,662**	**32,556**	**28,746**	**29,302**	**25,271**	**22,052**	**6,361**	**Mar-17**	**226%**	**-31.0%**	**-0.5%**
Loan-loss provisions	-22,668	-82,547	-21,800	-14,500	-10,699	-8,342	-1,888	Mar-17	620%	-50.5%	1.7%
Other income, net	-23,430	-37,142	-2,789	-1,739	-3,819	-6,993	-652	Mar-17	-299%	110.4%	-52.8%
Profit before taxes	-17,436	-87,133	4,156	13,063	10,753	6,717	3,820	Mar-17	108%	-25.1%	21.2%
Net attributable income	**-14,717**	**-73,706**	**8,790**	**11,343**	**9,312**	**6,078**	**3,514**	**Mar-17**	**122%**	**-23.7%**	**31.2%**

Source: Statistical Bulletin of the Bank of Spain

Tabla 3 Relative size and resources %, number and % variation of the banking system

	2011	2012	2013	2014	2015	2016	2017	Date	Growth rate 00-'08	08-latest	y-on-y
Lending to the private sector / GDP	166%	152%	139%	133%	123%	115%	113%	Mar-17	94%	-32.8%	-9.2%
Private sector deposits / GDP	111%	111%	113%	111%	108%	104%	102%	Mar-17	69%	-3.4%	-6.7%
Number of employees	248,093	236,504	217,878	208,291	202,954	194,283	n.d.	Dec-16	14%	-30.2%	-4.3%
Number of branches	40,202	38,237	33,786	32,073	31,155	28,959	28,553	Mar-17	17%	-38.2%	-7.5%

Source: Statistical Bulletin of the Bank of Spain

Table 4 ORS credit breakdown, defaults and non-performing asset ratios by portfolio. € bn and % variation

									Growth rate		
Lending volume	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**Date**	**00-'08**	**08-latest**	**y-on-y**
Loans to households	**793**	**756**	**715**	**690**	**663**	**652**	**648**	**Mar-17**	**236%**	**-20.9%**	**-1.5%**
Of which:											
Housing loans	627	605	581	558	531	517	513	Mar-17	270%	-18.2%	-2.6%
Other loans to households	167	151	134	132	132	136	136	Mar-17	159%	-29.7%	2.7%
Lending to corporates and SMEs	**971**	**830**	**719**	**674**	**644**	**605**	**598**	**Mar-17**	**237%**	**-41.2%**	**-2.9%**
Of which:											
Lending to real estate	397	300	237	200	179	161	158	Mar-17	517%	-66.4%	-8.1%
Other lending to corporates and SMEs	574	530	482	474	465	444	441	Mar-17	142%	-19.5%	-1.0%
Total lending to domestic private sector *	**1,783**	**1,605**	**1,448**	**1,380**	**1,327**	**1,276**	**1,266**	**Mar-17**	**234%**	**-32.3%**	**-2.1%**
Non-performing loans											
Loans to households	**28.7**	**37.0**	**49.4**	**46.8**	**37.0**	**35.7**	**36.0**	**Mar-17**	**1062%**	**47.8%**	**-0.6%**
Of which:											
Housing loans	18.2	24.0	34.6	32.6	25.5	24.1	24.2	Mar-17	1878%	63.3%	-3.7%
Other loans to households	10.5	13.0	14.8	14.1	11.4	11.6	11.8	Mar-17	607%	23.6%	6.4%
Lending to corporates and SMEs	**109.9**	**128.4**	**146.1**	**124.6**	**94.2**	**79.2**	**74.3**	**Mar-17**	**818%**	**99.3%**	**-17.6%**
Of which:											
Lending to real estate	81.9	84.8	87.8	70.7	50.4	42.4	39.2	Mar-17	2790%	46.0%	-18.3%
Other lending to corporates and SMEs	28.0	43.6	58.2	53.9	43.7	36.8	35.1	Mar-17	232%	237.0%	-16.7%
Total lending to domestic private sector *	**139.8**	**167.5**	**197.2**	**172.6**	**134.3**	**116.3**	**111.8**	**Mar-17**	**808%**	**77.2%**	**-13.5%**
Ratios de mora											
Loans to households	**3.6%**	**4.9%**	**6.9%**	**6.8%**	**5.6%**	**5.5%**	**5.5%**	**Mar-17**	**246%**	**86.8%**	**1.0%**
Of which:											
Housing loans	2.9%	4.0%	6.0%	5.9%	4.8%	4.7%	4.7%	Mar-17	434%	99.5%	-1.1%
Other loans to households	6.3%	8.6%	11.1%	10.7%	8.7%	8.5%	8.7%	Mar-17	173%	75.8%	3.7%
Lending to corporates and SMEs	**11.3%**	**15.5%**	**20.3%**	**18.5%**	**14.6%**	**13.1%**	**12.4%**	**Mar-17**	**173%**	**238.9%**	**-15.1%**
Of which:											
Lending to real estate	20.6%	28.2%	37.1%	35.3%	28.2%	26.4%	24.9%	Mar-17	369%	335.1%	-11.1%
Other lending to corporates and SMEs	4.9%	8.2%	12.1%	11.4%	9.4%	8.3%	8.0%	Mar-17	37%	318.5%	-15.9%
Total lending to domestic private sector *	**7.8%**	**10.4%**	**13.6%**	**12.5%**	**10.1%**	**9.1%**	**8.8%**	**Mar-17**	**172%**	**161.8%**	**-11.6%**

(*) Total ORS credit incorporates total credit to households, total credit for productive activities, non-profit institutions serving households (NPISHs) and unclassified credit. From January 2014 it includes credit to Financial Institutions.
Source: Statistical Bulletin of the Bank of Spain

Table 5 Details of new lending transactions Cumulative annual earnings € bn and % change

									Growth rate		
	2011	2012	2013	2014	2015	2016	2017	Date	03-'08	08-'16	y-on-y
Loans to households	**74.3**	**63.3**	**51.2**	**60.5**	**75.7**	**80.6**	**34.2**	**May-17**	**0.7%**	**-56.7%**	**-0.7%**
Of which:											
Housing loans	37.5	32.3	21.9	26.8	35.7	37.5	15.3	May-17	-15.6%	-56.9%	-9.4%
Other loans to households	36.8	31.0	29.4	33.7	40.0	43.1	18.8	May-17	21.3%	-56.4%	7.8%
Lending to corporates and SMEs	**527.5**	**484.8**	**392.6**	**357.2**	**392.6**	**323.6**	**135.3**	**May-17**	**29.2%**	**-65.2%**	**1.8%**
Of which:											
Less than €250,000	136.4	114.4	106.1	112.3	128.7	133.6	57.8	May-17	n.d.	-18.7%	7.1%
Between €250,000 and €1million)	37.7	31.6	28.3	34.0	36.8	36.3	15.7	May-17	n.d.	-21.0%	6.9%
Corporates (loans > €1mill.)	353.4	338.9	258.2	210.3	227.2	152.6	61.7	May-17	43.5%	-66.4%	-2.4%
Total new lending flows	**602**	**548**	**444**	**418**	**468**	**404**	**169.4**	**May-17**	**23%**	**-58.0%**	**-1.3%**

Source: Banco de España.

Table 6 Detail of deposits of residents. € bn and % variation

									Growth rate		
	2011	2012	2013	2014	2015	2016	2017	Date	00-'08	08-latest	y-on-y
Sight deposits	270	265	282	329	384	454	475	Mar-17	100%	94%	20.0%
Savings deposits	203	199	206	222	254	288	296	Mar-17	73%	64.6%	15.4%
Term deposits	698	684	668	588	499	394	359	Mar-17	270%	-50.7%	-23.8%
Foreign currency deposits	18	20	21	22	21	20	21	Mar-17	527%	-28.0%	1.5%
Total deposits of domestic resident sector *	**1,188**	**1,168**	**1,177**	**1,160**	**1,159**	**1,157**	**1,152**	**Mar-17**	**163%**	**-2.7%**	**0.6%**

(*) Total ORS deposits does not match the data of Table 1 because it incorporates liabilities from asset transfer, subordinated deposits, CTAs and hybrid instruments.
Source: Statistical Bulletin of the Bank of Spain

Table 7 Interest rates on credit operations. Rates in % and variation in pbs

	2011	2012	2013	2014	2015	2016	2017	Date	Growth rate (pbs) 03-'08	08-latest	y-on-y
Loans. Stock (NDER)											
Loans to households											
Housing loans	3.12	2.61	2.11	1.89	1.53	1.30	1.26	Apr-17	178	-439	-15
Other loans to households	5.73	5.78	5.80	6.10	5.98	6.17	6.19	Apr-17	113	-88	18
Loans to corporates and SMEs	3.90	3.47	3.44	2.84	2.38	2.04	2.00	Apr-17	204	-356	-25
Loans. New lending transactions (APRC)											
Loans to households											
Housing loans	3.66	2.93	3.16	2.64	2.31	2.19	2.19	Apr-17	238	-365	-12
Consumer loans	9.11	8.32	9.52	8.98	8.43	8.14	8.67	Apr-17	237	-233	70
Other	6.29	6.23	5.92	4.91	4.28	4.26	4.65	Apr-17	224	-239	-12
Loans to corporates and SMEs (synthetic average)	4.03	3.66	3.57	2.73	2.58	2.30	2.58	Apr-17	112	-230	-18
Less than €250,000	5.57	5.67	5.54	4.56	3.61	3.29	3.45	Apr-17	n.d.	-110	-23
Between €250,000 and €1million)	4.79	4.27	4.03	2.91	2.20	1.91	1.91	Apr-17	n.d.	-197	-24
Corporates (loans > €1mill.)	3.53	3.00	2.83	2.10	2.07	1.63	1.80	Apr-17	n.d.	-91	-6

NDER: Narrowly Defined Effective Rate (APR less commissions)
APR: Equivalent Annual Rate. Narrowly Defined Effective Rate (APR less commissions)
Source: Statistical Bulletin of the Bank of Spain

Table 8 Deposit interest rate* Rates in % and variation in pbs

	2011	2012	2013	2014	2015	2016	2017	Date	Growth rate (pbs) 03-'08	08-latest	y-on-y
Deposits. Stock (NDER)											
Households deposits											
Sight deposits	0.28	0.21	0.22	0.17	0.12	0.06	0.05	Apr-17	6,5	-64	-5
Term deposits	2.76	2.72	2.08	1.39	0.75	0.30	0.22	Apr-17	232	-418	-34
Corporates and SMEs deposits											
Sight deposits	0.61	0.37	0.35	0.31	0.24	0.15	0.12	Apr-17	111	-165	-13
Term deposits	2.68	2.64	1.93	1.40	0.91	0.65	0.66	Apr-17	223	-372	-12
Deposits. New transactions (NDER)											
Households deposits											
Sight deposits	0.28	0.21	0.22	0.17	0.12	0.06	0.05	Apr-17	30	-64	-5
Term deposits	2.79	2.83	1.50	0.66	0.39	0.11	0.09	Apr-17	225	-409	-16
Corporates and SMEs deposits											
Sight deposits	0.61	0.37	0.35	0.31	0.24	0.15	0.12	Apr-17	111	-165	-13
Term deposits	2.13	2.08	1.31	0.51	0.31	0.13	0.19	Apr-17	146	-328	-8

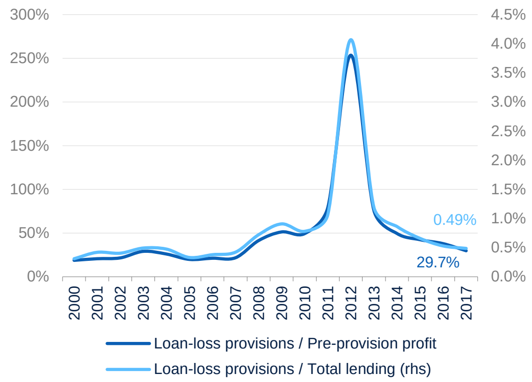
NDER: Narrowly Defined Effective Rate (APR less commissions)
APR: Equivalent Annual Rate. Narrowly Defined Effective Rate (APR less commissions)
Source: Statistical Bulletin of the Bank of Spain

Table 9 Main ratios

	2011	2012	2013	2014	2015	2016	2017	Date	Growth rate 00-'08	08-latest	y-on-y
Productivity											
Business volume* per branch (€'000)	73,894	72,524	77,713	79,197	79,794	84,027	83,495	Mar-17	170%	26.3%	5.7%
Profit before tax per branch (€'000)	-433.7	-2.279	123.0	407.3	345.2	231.9	535.2	Mar-17	77.5%	21.2%	31.0%
Efficiency											
Cost-to-Income ratio (Oper. expenses / Total revenue)	49.8%	45.3%	48.2%	47.1%	51.0%	54.5%	50.3%	Mar-17	-29.3%	13.1%	-0.6%
Operating expenses / ATA	0.86%	0.79%	0.83%	0.88%	0.93%	0.98%	0.98%	Mar-17	-43.4%	2.0%	7.6%
Profitability											
RoE	-7.4%	-35.5%	4.1%	4.9%	4.1%	2.7%	6.2%	Mar-17	-3.4%	-40.5%	30.5%
RoA	-0.52%	-2.55%	0.13%	0.44%	0.38%	0.25%	0.58%	Mar-17	-23.6%	-12.3%	26.5%
NIM (Net interest rev. / ATA)	0.89%	0.96%	0.83%	0.91%	0.93%	0.90%	0.90%	Mar-17	-29.6%	-21.3%	1.0%
Liquidity											
Loans-to-Deposits (resident sector)	150%	137%	123%	119%	115%	110%	110%	Mar-17	14.8%	-30.4%	-2.7%
Funding gap (Loans - Deposits, EUR bn)	594.4	436.8	270.9	220.1	168.3	118.9	114.4	Mar-17	349%	-83.3%	-22.8%
Funding gap / Total assets	17.5%	12.8%	9.0%	7.6%	6.1%	4.5%	4.4%	Mar-17	57.7%	-79.5%	-19.4%
Solvency and Asset Quality											
Leverage (Shareholders' equity / Total assets)	6.5%	5.7%	7.7%	7.9%	8.2%	8.6%	8.7%	Mar-17	-17.8%	55.6%	5.5%
Shareholders' equity / NPLs	158%	117%	118%	133%	169%	196%	205%	Mar-17	-74.3%	-28.5%	16.9%
Provisioning effort (Loan-loss prov. / Pre-provision profit)	79.1%	253.6%	75.8%	49.5%	42.3%	37.8%	29.7%	Mar-17	121%	-28.2%	2.2%
Cost of Risk (Loan-loss provisions / total lending)	1.06%	4.07%	1.19%	0.86%	0.66%	0.53%	0.49%	Mar-17	134%	-26.7%	13.0%
NPL ratio (resident sector)	7.8%	10.4%	13.6%	12.5%	10.1%	9.1%	8.8%	Mar-17	172%	162%	-11.6%
NPL coverage ratio (total)	59.6%	73.8%	58.0%	58.1%	58.9%	58.9%	59.1%	Mar-17	-58.2%	-16.5%	0.0%
NPL coverage ratio (specific provisions)	37.1%	44.7%	46.9%	46.7%	47.0%	46.2%	n.d.	Dec-16	-39.0%	54.4%	-0.9%

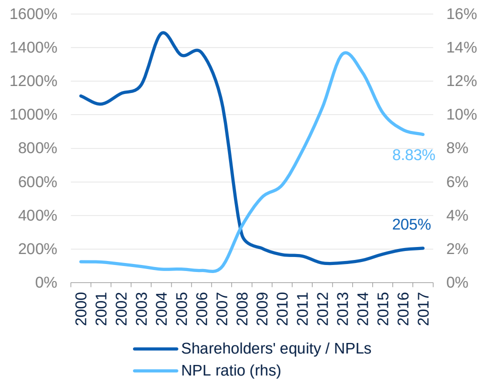
(*) ORS Credit plus ORS Deposits
Source: Statistical Bulletin of the Bank of Spain

Figure A1.1 Effort in provisions



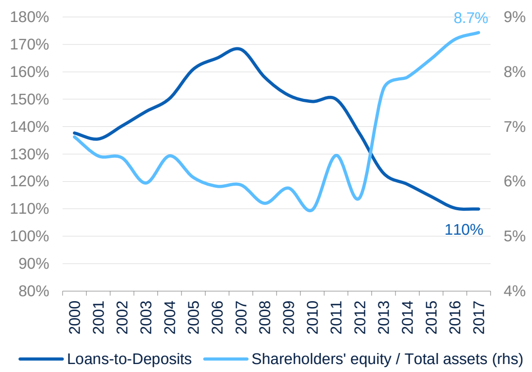
Source: BBVA Research

Figure A1.2 Delinquency and Capital Delinquency



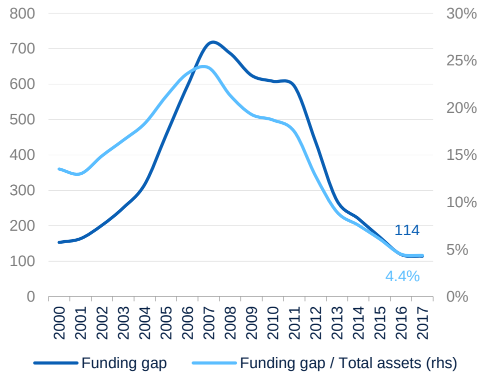
Source: BBVA Research

Figure A1.3 Liquidity and leverage



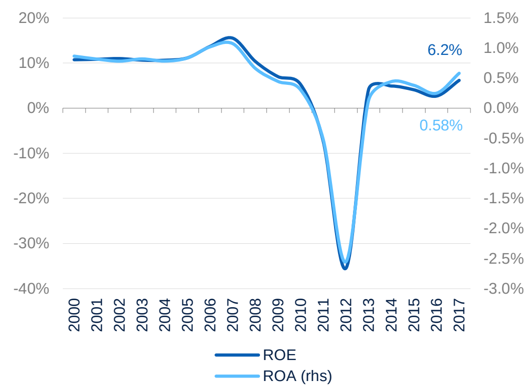
Source: BBVA Research

Figure A1.4 Funding gap
(ORS credit – ORS deposits, € bn)



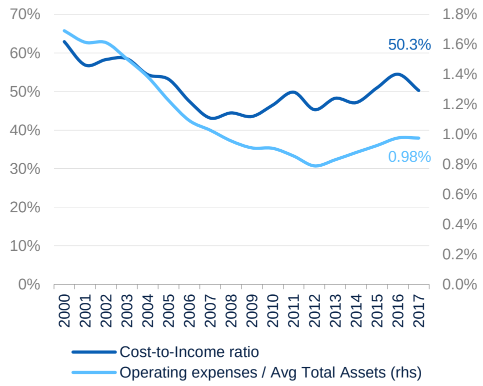
Source: BBVA Research

Figure A1.5 Return



Source: BBVA Research

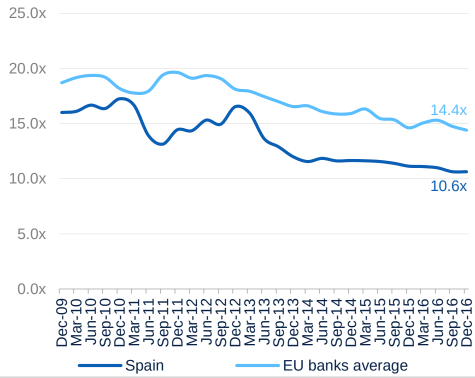
Figure A1.6 Efficiency



Source: BBVA Research

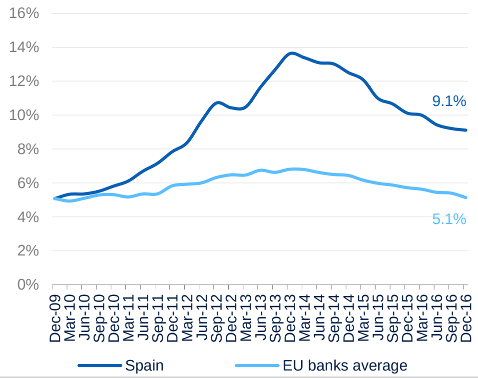
Appendix 2: Evolution of the Spanish banking sector

Figure A2.1 Total liabilities / Capital in balance



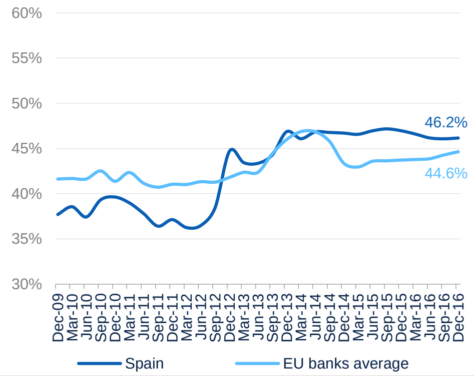
Source: EBA, Banco de España, BBVA Research

Figure A2.2 Delinquency ratio



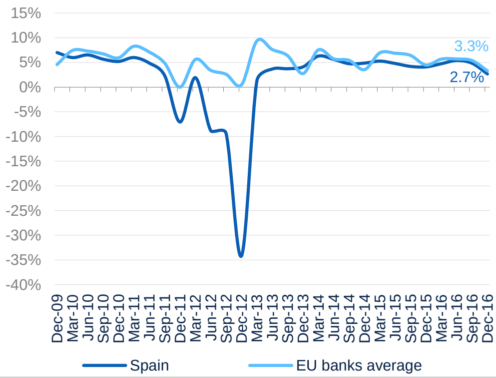
Source: EBA, Banco de España, BBVA Research

Figure A2.3 Coverage ratio (specific provisions only)



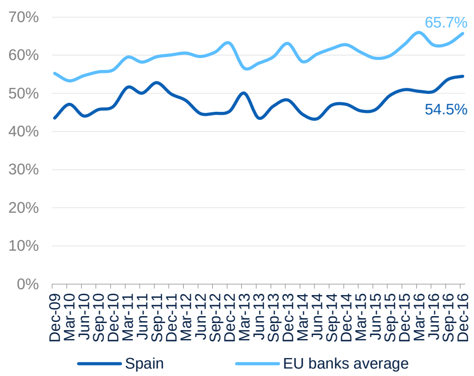
Source: EBA, Banco de España, BBVA Research

Figure A2.4 ROE



Source: EBA, Banco de España, BBVA Research

Figure A2.5 Cost/income ratio:



Source: EBA, Banco de España, BBVA Research

Note: The averages data of the European banks come from "Risk Dashboard" of the EBA, composed of a panel of 158 major banks in the EU.

DISCLAIMER

Este informe ha sido elaborado por la unidad de Sistemas Financieros

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