

The logo for BBVA Research, featuring the word "BBVA" in a bold, white, sans-serif font, followed by the word "Research" in a smaller, lighter weight of the same font. A small teal square is positioned to the right of the word "Research".

BBVA Research

Banking Outlook

November 2018

Financial Systems Unit

A photograph of a modern, curved skyscraper with a glass facade and a distinctive white, ribbed architectural feature at the top. The building is set against a clear blue sky. In the foreground, there are lush green trees and a paved walkway.

Creating Opportunities

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Closing date: **26 November 2018**

Summary

1. Trends and developments in the Spanish banking sector

Net profit in the first half of 2018 was 6,654 million euros compared with losses of 6,170 million in the first semester of 2017, period in which the resolution of Banco Popular had an impact. In 2018 the keys to the results are cost control and a notable decrease in provisions. Defaulting within the system as well as the deleveraging of the private sector continues. The system's efficiency and profitability improved in the first half of the year compared with levels in 2017.

2. Survey on bank loans: The environment for granting credit in Spain is improving

The recent Bank of Spain Surveys on Bank Loans point to a certain relaxation in the conditions for granting loans, in line with a greater demand from families, while businesses are learning to live with less bank credit, which although growing, is doing so with less force than in previous periods. The aforementioned creates an environment in which new credit operations should continue to increase, as evidenced by the latest available data, however not excessively.

3. Consumer loans in Spain: Growing yet under control

Consumer credit in Spain has recovered growth levels of the previous expansion period, after a sharp fall in stock during the years of crisis and in response to the demand and an improvement in the macroeconomic situation. This growth is driven by the financing of consumer durable goods, which is showing very low default levels (2.9%). Despite the above, it still represents a very small percentage of the total credit portfolio (7.2%), and in terms of GDP it is in line with the Eurozone (7.0%). In addition, families show greater financial strength than before the crisis, with a financial burden that remains at around 11%.

4. Non-performing loans in Europe: A complex problem

Non-performing loans from European banks have gradually reduced over the last few years, especially in countries such as Spain. This issue is a priority for the European authorities who have proposed a wide range of measures including recent supervisory measures on the stock of non-performing loans. These initiatives should take into account the situation of each country and bank, and not distract attention from the objective of moving towards a mutualisation of risks within the framework of the Banking Union.

5. Are crypto currencies dying?

In 2018, the value of crypto currencies has lost approximately 75% since their peak in January of this year (USD 814 bn). Many analysts claim that it was an inevitable catastrophe given the intrinsic characteristics of crypto currencies, however this catastrophe is relative if we consider that the price of a bitcoin, for example, is still 80% higher than a year ago. Despite the volatility of these assets, crypto currencies are beginning to attract the attention of the "traditional financial sector". In short, it does not seem that crypto currencies are dying but rather are entering a new stage of greater price stability, in which more institutional investors will be attracted and banks will offer associated services to their clients.

1. Developments in the Spanish banking industry

Tables and data can be found in the appendices to this document. Most of the data is taken from Chapter 4 of the Banco de España Statistical Bulletin. Analysis of the Spanish banking industry **is confined to banking business in Spain**¹.

Industry results

- In the first half of 2018, the keys to the system's results are the control of operating costs and a decrease in provisions.
- Revenue continues to show some weakness, although in the second quarter it is higher than in the first. Net interest income was 2.5% lower than in the first six months of last year due to an ongoing decrease in business volume and the interest rate environment. However, net fees and commissions and income from financial transactions are growing by around 2% year on year, which results in flat total revenue.
- Accumulated operating expenses fall 3.2% in the first half of the year compared to the same period in 2017, due to the reduction in general expenses (-6.7%), whereas personnel expenses remain flat. The decrease in general overheads was partly due to the integration of Banco Popular into Grupo Santander in the second quarter of 2017.
- The evolution of revenue and expenses improves the system's efficiency ratio to 53.8%, while pre-provision profit grew 3.5% year-on-year in the first half of 2018.
- The lower side of the account shows a significant improvement with respect to 2017 as it is no longer affected by the resolution of Banco Popular. Provisions for loan-losses and "other income" are reduced by 72.3% and 79.5%, respectively. In 2017, these items were impacted by more than 10,300 million euros of write-downs and losses due to the Banco Popular transaction. Irrespective of this effect, the provisions in the first half of 2018 are significantly lower than in 2017, with ratios such as cost-of-risk (provisions for insolvencies / average credit) and provisioning effort (provisions for insolvencies / net margin) of 0.21% and 14.1% respectively, well below previous periods and in line with the years prior to the crisis.
- Ultimately, the Spanish banking system's net income is 6,654 million euros in the first six months of the year, which compares with losses of 6,170 million for the same period last year.

Activity

- The size of the system continues to decrease (table 1). As of September, total assets fall 2.3% YoY, remaining below €2,600 bn, a volume similar to that of 2007. The system's total assets today represent 218% of GDP (324% in 2012). Operational resources and staff also continue to decline. The number of employees and bank branches in the system show decreases of 31% and 42% from the maximum figures in 2008 (table 3).
- On the asset side, the trend of recent quarters or years continues. Credit granted to the resident private sector is also shrinking as well as the fixed income and equity portfolios, while loans to non-residents grow.

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

- On the liability side, ORS deposits and non-resident deposits fall slightly although deposits from the Public Sector increase, while the debt volume on the balance sheet increases 13.1% YoY as of September 2018 (virtually stable since the 2017 year-end), partly due to the need to satisfy MREL requirements. Demand and term deposits registered a slight increase (+0.5%) since September last year (table 6). Once again we are seeing a shift from term deposits to demand deposit accounts due to their low interest return. Recourse to ECB liquidity marks a departure from the upward trend of previous quarters and shows a slight fall of 4% YoY as of October this year. The volume of accumulated capital on the balance sheet (capital plus reserves) is 24% higher than at the beginning of the crisis, although in 2018 it shows a slight fall caused by 2017 losses and the initial impact of the adoption of the new international accounting rules (IFRS9).

Spotlight on lending and NPLs

- The stock of credit to the private sector continues its downward trend (table 4) and falls by 2.9% YoY in September. The volume of credit in the system represents 102% of GDP, as against 171% at the end of 2010 (table 3).
- During the second quarter of 2018 there were no significant sales of loan portfolios and other real estate assets, although several transactions were announced by BBVA, Caixabank and Banco Sabadell that will be completed in upcoming months. The selling of these assets will prolong the deleveraging process, yet they will give rise to a considerable improvement in the quality of the system's assets. During the first quarter, the sale of real estate assets and loans from Banco Santander to Blackstone was completed for a total gross amount of €30 bn.
- By portfolios, based on data as of June 2018 the volume of lending to households remains at practically the same level as June 2017, with a YoY decrease in mortgage lending and a 6.1% rise in loans to households for purposes other than home purchases. Lending to companies fell 5.8% because of the 15% fall in lending to real estate activities as a result of the Banco Santander transaction in the first quarter of the year. The rest of lending to companies falls slightly at June 2018.
- With respect to the system's NPL ratio, it stood at 6.18% in September 2018, 25.8% (215 basis points) lower than twelve months earlier. The downward trend in NPLs witnessed since December 2013 became more acute in 2018 due to the sale of the Banco Popular loan portfolios, falling 28% YoY as of August (- €29.1 bn since September 2017). Since the NPL peak reached in December 2013, the volume of non-performing loans has fallen by 62% (-€122 bn). The volume of NPLs has fallen continuously every month since January 2014.
- Cumulative data as of September 2018 indicates that new lending is still on an upward trend (+9.6% YoY), with growth in all portfolios. However, the new loans are about a third of those generated in the years prior to the crisis.

Key ratios

- In the first half of 2018, the system's efficiency and profitability regained their levels prior to the resolution of Banco Popular. The efficiency ratio has thus improved from 57.1% for 2017 as a whole to 53.8%, while the volume of operating expenses is less than 1% of Average Total Assets (Figure 6, Appendix 1).
- The system's profitability has returned to positive territory in 2018 (Figure 5, Appendix 1). ROE stands at 5.8% and ROA at 0.59%. The indicators for provisioning effort (provision allowances / net income) and the cost of risk (provision allowances / average total lending) dropped substantially in the first half of the year as previously commented (Figure 1, Appendix 1).

- The system's solvency continues to stand strong. The volume of capital on the balance sheet (paid up capital and cumulated reserves) reached 8.7% of total assets as of September 2018 (Figure 3, Appendix 1), and own funds on the balance sheet tripled the system's NPLs (Figure 2, Appendix 1).
- Liquidity still does not represent a problem. The funding gap (Figure 4, Appendix 1) reduces once again in the first nine months of the year reaching an all-time low, at 2.2% of the balance sheet total, far removed from its 2007 peak (24% of the balance sheet) marking a decline of more than €600 bn.

International comparison

The comparison of the Spanish banking system with the average for EU banks (Appendix 2) is done with data from the "Risk Dashboard" of the European Banking Authority (EBA) which includes an average of 158 of the main EU banking institutions at consolidated level. The latest data available is from March 2018.

- Spanish banks have more equity on their balance sheet and are more efficient than their European competitors (Figures 1 and 5, Appendix 2).
- Even so, the system's NPL ratio is clearly higher (Figure 2, Appendix 2) despite the decrease in the volume of NPLs which accelerated in the first half of the year.
- Profitability has returned to positive territory after the impact of the losses arising from the resolution of Banco Popular in 2017 (Figure 4, Appendix 2).
- With respect to protecting the balance sheet, the impairment of the coverage ratio in 2017, caused by an increased recognition of NPLs within Banco Popular, was an isolated event (Figure 3, Appendix 2).

2 Survey on bank loans: The environment for granting loans in Spain is improving

The Banco de España publishes its quarterly Survey on Bank Loans in Spain, in which it provides relevant information on the evolution of demand for credit and the conditions applied by banks to grant loans. The latest surveys published on the credit market in the second and third quarters of 2018 indicate a change in the trend towards a softening of the concession criteria. In the following points we summarize the main messages of these surveys.

Credit supply

Since April 2018, loan approval criteria in Spain has loosened slightly in all segments, especially for loans to large companies, both short and long term, while SME financing has shown no noticeable changes. The same trend was observed in the third quarter for consumer credit, however not for home purchase loans. In general terms, Spanish banks have reduced their risk perception and have slightly increased their risk tolerance.

In turn, the general conditions applied to new loans were also generally softened, especially regarding loans to families for consumption and other purposes and loans to companies, however not for SMEs. The relaxation of general conditions is due to increased competition and, to a lesser extent, lower financing costs, lower risk perception and a greater tolerance of such risks by the banks.

In this respect, there has been a slight decrease in the margins applied to ordinary loans and some increase in the maturity dates and amounts granted, whereas the margins applied to higher risk loans have increased slightly, as well as the expenses charged to these loans, excluding interest, while all other conditions remain stable.

Demand

In the second and third quarters of 2018 the demand for household loans has grown in all segments, with a significantly stronger rise in demand for consumer credit and for purposes other than home purchases. The indicators behind this greater demand are increased competition, lower interest rates, increased consumer confidence and better economic prospects (especially in the second quarter, not so much in the third). In addition, the percentage of rejected finance requests continues to decrease, especially regarding consumer credit.

On the other hand, applications for loans to companies have remained stable, both from SMEs and from large companies. Several factors are compensated to explain this evolution. Positive factors include lower interest rates and higher financing needs for working capital and inventories, and fewer share repurchases. Negative factors include the decrease in finance required for fixed capital investment, the increase in self-financing and the lower volume of debt refinancing operations.

Other factors affecting credit

Regulatory measures: Spanish banks declared that during the first nine months of 2018, the **regulatory changes** did not have an impact on the level of assets. However, these measures have boosted an increase in their capital levels. In addition, the banks stated that these actions have not had a significant impact on lending criteria and lending margins in any of the segments, nor have they influenced the banks' finance conditions.

Search for profitability and pressure from the competition: Spanish banks stressed that the search for profitability and pressure from the competition were the most relevant factors during the first nine months of the year for setting margins (prices) in all segments, whereas these factors were also most relevant between 2014 and 2017.

Non-performing loans: Spanish banks pointed out that the non-performing loans hardly affected the criteria for granting loans and the conditions applied in the first three quarters of the year, once the level of non-performing loans had reached a lower level than in previous years. However, during the 2014-2017 period, NPLs led to a tightening of loan granting criteria as well as the conditions applied to loans in some segments, mainly due to higher costs of capital and balance sheet write-down transactions.

In summary, the recent Bank of Spain Surveys on Bank Loans point to a certain relaxation in banks' conditions for granting loans, in line with greater demand from families, while businesses are learning to live with lower levels of bank credit, which, although growing, is doing so with less momentum than in previous periods. The aforementioned creates an environment in which new credit operations should increase, as is already being seen with the latest data available, however not excessively.

3. Consumer loans in Spain: Growing, yet under control

Consumer credit² in Spain recovered its growth path at the end of 2015. By then, its stock had fallen more than 47% compared with 2008 and was at minimums unobserved since 2004. Its recovery (13.0% YoY in September) is one of the most pronounced within the European Union, although it has slowed down with respect to the previous year. As figure 1 shows, this growth is common in times of expansion. Growth during the 2015-2018 period was driven by the increase in durable goods financing, which, although it has slowed down, grew to 18.8% YoY in June. Non-durable goods grew at a slower rate of 8.1%.

The increase in financing is explained by the recovery in household consumption in line with the evolution of the economy. Owing to the crisis, families increased their savings rate and postponed the purchase of consumer durables. In recent years this trend has been reverted, in a context of job creation and increased consumer confidence. Banks, on the other hand, following the trend of the Eurozone, have relaxed the criteria for granting loans and their conditions, as well as rejecting fewer finance requests in an environment of lower risk perception.

Between January and September, new consumer credit operations grew at a rate of 21.2% compared to the same period last year. Longer term operations, which have grown the most since 2015, increased by 29.5%. Despite this behaviour, on average, the volume granted during this period is 40.7% lower than that of the previous expansion period, hence the growth observed is within control. After this recent growth and the deleveraging in the rest of portfolios, the weight of consumer credit in Spain increased to 7.2% of total credit, but it remains low and similar to the average for the Eurozone (6.7%). In terms of GDP, it represents 7%, slightly higher than that of the Eurozone (5.9%).

The prices for this type of credit have fallen since 2008, although they remain high. The margin on the Euribor is higher than it was then, indicating that credit prices reflect the greater risk of this type of financing. The average rate between January and September 2018 was 7.5%, 14 bps (basis points) lower than the rates in the same period in 2017, and 277 bps lower than in 2008. The sharpest drop was in short-term financing (falling from 11.01% in 2008 to 3.64%).

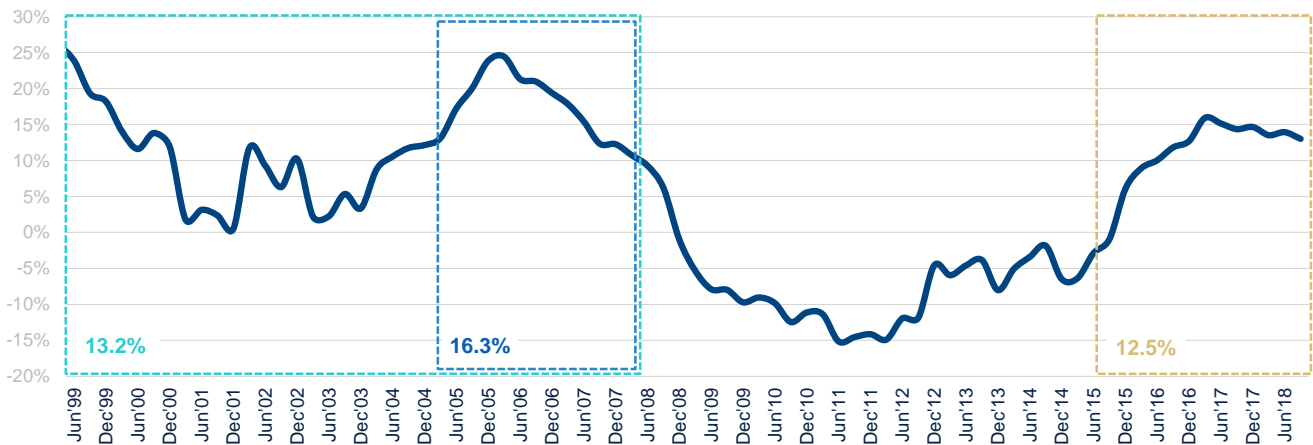
Together with the increase in consumer credit in recent years, the non-performing loan ratio for this type of credit has fallen. According to data from the Bank of Spain, NPLs were around 5.2% at the end of 2017 (the latest data available for this loan portfolio). Compared to other Eurozone countries, it is similar to Italy (5.3%) and far lower than Portugal (9.4%). Broken down into its components, the latest data available put the non-performing loans ratio for the acquisition of non-durable goods at 7.1% and of durable goods at 2.9%. Regarding the latter, the amount of non-performing loans has increased in recent quarters although, before the crisis, episodes of much higher growth were registered. In any case, they are growing at a rate similar to that of the credit stock (denominator), so the NPL ratio remains stable.

On the other hand, households are showing a more comfortable financial position allowing the accommodation of this increase in consumer credit. In the second quarter, the financial burden on Spanish households stood at 10.8%, a level that has been maintained since the beginning of 2015, and very far removed from the levels reached when the crisis broke out (17.4% in 2008). In more detail, the mortgage burden has halved since 2008 (4.2% in June 2018), while the burden of "other household finance" (which includes consumption) has increased from 5.4% to 6.5% since 2015, a low figure when compared with the 8.7% in 2008.

2: Data obtained from the statistical bulletin of the Banco de España (deposit institutions and FCIs), ECB and BIS.

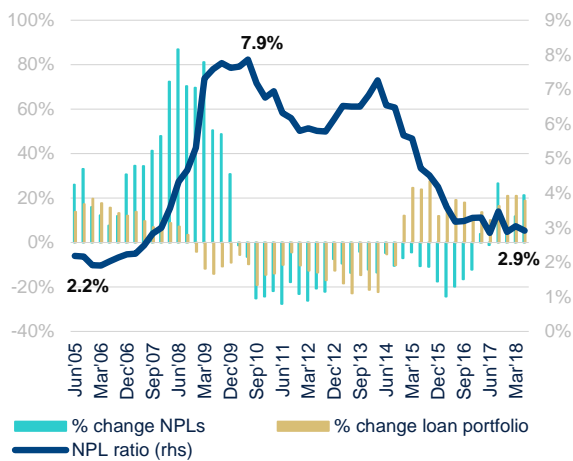
Consumer credit stands out as the only type of credit that increases in a context in which the stock of credit for home purchases and credit to companies continues to fall. In response to the demand and improved employment prospects, financing for the purchase of consumer durables has increased and is showing high creditworthiness. This increase is no different from previous expansion periods, but it is important to monitor its evolution.

Figure 1 YoY evolution of consumer credit. Average growth in specific periods



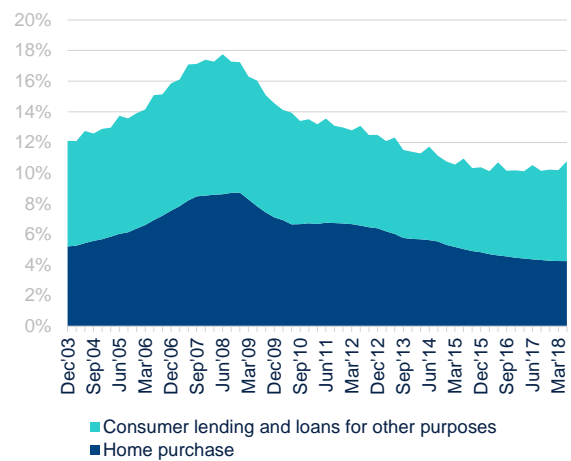
Source: BBVA Research based on Banco de España data

Figure 2 Ratio of Non-performing loans to finance durable consumer goods and the YoY growth of their components



Source: BBVA Research based on Banco de España data

Figure 3 Financial burdens on Spanish households (% gross income available)



Source: BBVA Research based on Banco de España data

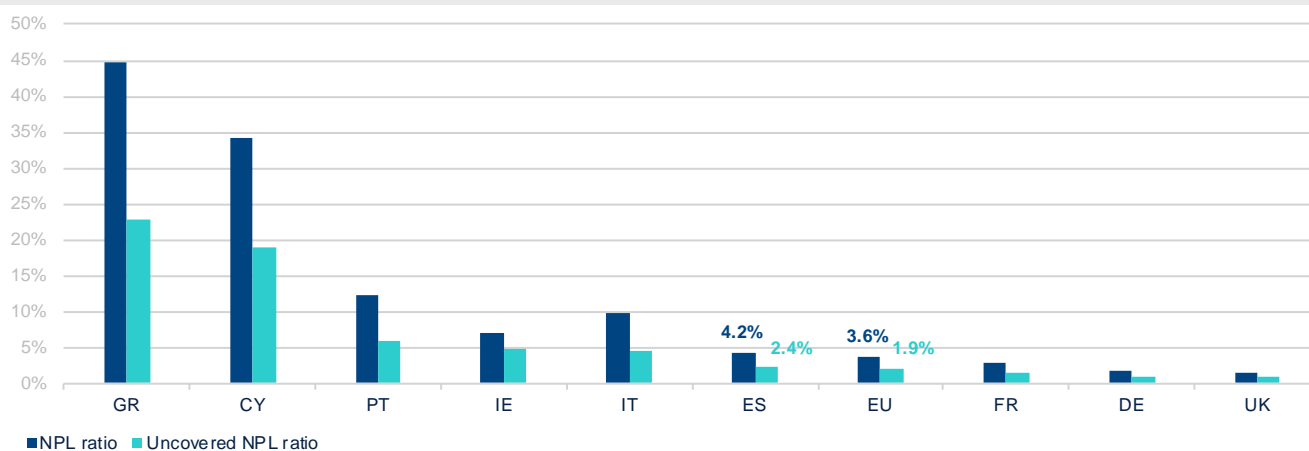
4. Non-performing loans in Europe: A complex problem

Non-performing loans, a problem inherited from the crisis that continues to improve

Non-performing loans (NPLs) are one of the main problems inherited from the financial crisis, so both public and private agents have made significant efforts to reduce them over the past few years. In particular, some core European countries claim that reducing them (the so-called "risk reduction") is a precondition for progress towards completing the Banking Union (through the "mutualisation of risks"). In any event, the level of default that would be considered acceptable has not been clarified and many peripheral economies understand that Europe can, and must, advance towards reducing and mutualising risk together.

There are currently around €700 billion in non-performing loans in the EU, distributed unevenly between the countries. In general terms, asset quality has improved in the EU, and particularly in countries such as Spain, where the stock of NPLs is now less than half the figure at the 2013 peak (a reduction of €122 billion or 62%).

Figure 1 NPL ratio before and after coverage with provisions (June 18, %)



Source: BBVA Research from EBA, consolidated data

A priority for the European authorities

Several European initiatives have been proposed to address this problem. Of particular relevance was the Council Action Plan of July 2017, which identified the main lines of work, their deadlines and the European authority in charge of each one. As a result, several measures have been proposed or implemented, which can be grouped into three categories:

1. Secondary market:

- The Commission has proposed a draft directive to remove the obstacles to transferring loans and for third parties to manage these loans (servicing).

- The Commission developed a model to create national "bad banks", which could indicate that creating a single bad bank in the EU has been ruled out.
- The EBA, the ECB and the Commission are working on a transaction platform proposal.

2. Insolvency:

- The Commission proposed the introduction of an Accelerated Extrajudicial Collateral Enforcement, AECE, clause in contracts to speed up these processes, which is finding difficulties to be debated given its interactions with domestic rules.
- There has been discussion on how to harmonize insolvency regulation, but with limited success given the technical difficulties of the process.

3. Supervision:

- The ECB has published a guide on how to manage non-performing and refinanced loans, applicable to the systemic institutions within the scope of the Single Supervisory Mechanism (SSM).
- The Commission has proposed a provisioning path for new loans, under pillar 1, which is currently being discussed with the Council and the Parliament.
- The ECB has introduced a provisioning path for new NPLs, under pillar 2.

Finally, the ECB has just announced measures on the outstanding amount of non-performing loans, and no longer just for the new non-performing loans. The SSM will establish coverage expectations with provisions per entity, so that the coverage of flow and stock become equal in the medium term. The ECB currently indicates that new NPLs should have 100% coverage within two years if they do not have collateral and within seven years if they do. These expectations will be based on the bank's NPL ratio and other financial characteristics, which will be studied within the context of the characteristics of comparable banks.

This proposal has advantages, such as the study being carried out bank by bank. Any measures on NPLs should take into account the country's characteristics (such as the real estate bubble in Spain) as well as the bank's. In addition, the fact that it has a medium-term horizon and that the final coverage is similar in all entities is welcomed. These risk reduction measures should facilitate progress towards their mutualisation.

However, the downside is that details of the process for setting supervisory expectations are still unknown, such as the criteria for choosing comparable banks, whether individual or consolidated NPL rates will be used, or whether NPLs that have been overdue for less than 90 days will be treated in the same manner.

In short, there is a general consensus on the importance of reducing non-performing loans in Europe. The current approach, which tackles the problem with various measures, seems appropriate. However, the same measures should not be imposed equally on all countries. In any event, this process should not serve as an excuse to delay the risk mutualisation measures to which we have already committed ourselves in Europe, such as the introduction of a common deposit insurance scheme (EDIS).

5. Are crypto currencies dying?

It is no secret that 2018 is proving to be a difficult year for crypto currency trading. After reaching an all-time high in early January, with an aggregate theoretical market value of USD 814 billion, the price of virtually all of them has plummeted, losing up to 75% of their peak price. Many analysts claim that it was an inevitable catastrophe given the intrinsic characteristics of crypto currencies, although it could also be an example of how if any prediction is repeated a sufficient number of times, it ends up being fulfilled.

The question is: Are we witnessing the end of the crypto currencies? The answer is complicated. The price of the bitcoin, even after its collapse, is 80% higher than a year ago. Hence the catastrophe should be put in context. Objectively, for investors who bought at high prices, what happened is similar to the bursting of a bubble; but, for an investor with more than a year in the market, what happened in 2018 is only part of the game when it comes to assets of such extreme volatility.

If the question is whether the crypto currencies will return to their January levels, we think that is highly improbable. Vitalik Buterin, founder of Ethereum, has recently stated that the growths that multiplied some prices by 1,000 are highly unlikely in the future. However, other well-known "gurus" argue that the bitcoin will reach USD 50,000 this year. How is this possible?

The simplest explanation is that, actually, no one knows what might happen. The models commonly used to estimate asset price developments do not seem to work when applied to crypto currencies, for a variety of reasons. For example, pricing is done by matching supply and demand with variable volumes of negotiation, so that sometimes price variations follow almost exactly the crypto-community conversations on social networks. We could also cite the enormous concentration of the market, which facilitates its manipulation. Not to mention the obvious correlation between the rest of the crypto currencies and the bitcoin, whether direct (as it is a variation of the latter, such as a litecoin) or indirect (by association in the public opinion, such as ether), which makes a bitcoin price drop automatically drag all the others.

It is obvious that the volatility of these assets is a problem that seems to have a difficult solution. And yet surprisingly, it is now, apparently at its worst moment that crypto currencies are beginning to draw attention to what we might call the "traditional financial sector". Valdis Dombrovskis, Vice-President of the European Commission, stated that crypto currencies are here to stay and that they should be urgently classified and appropriately regulated. The number of banks that seem willing to offer services related to crypto currencies is growing on a daily basis and, if they are not already doing so, it is mainly due to the uncertainty and regulatory obstacles that are currently under debate. Whether it be by developing and selling derivatives linked to this new type of asset, or via the use of the decentralized infrastructures on which crypto assets are supported, the bank's interest in this phenomenon is at its highest level.

Faced with the challenge of volatility, for example, great efforts are being made within the crypto-community to design stable crypto currencies - "stablecoins" - through the use of collateral in trustee money or other crypto currency, or through algorithms that manage price by controlling the amount of currency in circulation. This is an emerging field, in which there is still much to develop and in which the number of projects is growing exponentially.

In short, it does not seem that crypto currencies are dying, but rather entering a new stage in which prices will stabilize, institutional investors will increase their ownership and banks will offer associated services to their clients. Derivatives, stablecoins and the ever-present possibility that some central bank may decide to issue its own crypto currency will be some of the factors that will shape this new era in the world of crypto assets.

Appendix 1: Main indicators of the Spanish banking system

Table A.1 Summary of the banking system balance sheet. Billion euros and percentage change

Assets	2012	2013	2014	2015	2016	2017	2018	Date	Growth rate			
									00-'08	08 - latest	y-on-y	
Total lending	1,951	1,716	1,651	1,603	1,556	1,532	1,517	Sep-18	217%	-30.3%	-0.3%	
<i>Public corporations</i>	114	87	101	90	88	78	75	Sep-18	69%	41.2%	-8.1%	
<i>Domestic resident sector</i>	1,605	1,448	1,380	1,327	1,276	1,254	1,213	Sep-18	234%	-35.1%	-2.9%	
<i>Non residents</i>	232	180	169	186	191	200	229	Sep-18	164%	-9.8%	19.5%	
Fixed income securities and equity stakes	766	773	754	662	610	589	570	Sep-18	132%	14.5%	-6.8%	
<i>Fixed income securities</i>	509	493	492	415	366	330	332	Sep-18	135%	2.0%	-6.1%	
<i>Of which: sovereign debt</i>	247	264	288	251	225	206	205	Sep-18	6%	105%	-6.8%	
<i>Equity</i>	258	280	262	246	244	260	238	Sep-18	128%	38.2%	-7.7%	
Interbank lending	279	211	155	164	163	235	203	Sep-18	81%	-22.8%	-2.7%	
Other assets (net of interbank lending/deposits)	426	326	354	331	319	297	291	Sep-18	230%	1.6%	-3.1%	
Total assets	3,423	3,026	2,913	2,760	2,647	2,653	2,581	Sep-18	184%	-19.9%	-2.3%	
Liabilities and Shareholders' Equity												
Customer deposits	1,725	1,684	1,686	1,637	1,578	1,539	1,546	Sep-18	169%	-23.2%	-0.7%	
<i>Public corporations</i>	69	63	76	77	54	62	71	Sep-18	263%	-6.6%	10.1%	
<i>Domestic resident sector</i>	1,317	1,314	1,289	1,261	1,243	1,203	1,207	Sep-18	192%	-15.7%	-1.3%	
<i>Non residents</i>	339	306	320	299	281	275	267	Sep-18	113%	-47.0%	-1.0%	
Interbank deposits	573	381	312	303	288	327	291	Sep-18	95%	-7.6%	-9.2%	
<i>Pro memoria: net interbank position</i>	294	171	157	139	125	93	88	Sep-18	215%	69.4%	-21.4%	
Debt issued	394	297	249	225	201	222	221	Sep-18	625%	-44.1%	13.1%	
Other liabilities	535	430	436	368	352	331	300	Sep-18	253%	-6.1%	-10.5%	
Shareholders' equity	195	233	230	227	227	232	223	Sep-18	134%	23.8%	-4.6%	
<i>Pro memoria: ECB funding</i>	357	207	142	133	140	168	168	Oct-18	566%	80.9%	-4.1%	
Total Liabilities and Shareholders' Equity	3,423	3,026	2,913	2,760	2,647	2,653	2,581	Sep-18	184%	-19.9%	-2.3%	

Source: Banco de España Statistical Bulletin

Table A.2 Summarised banking system balance sheet. Cumulative annual earnings and percentage change in millions of Euros

	2012	2013	2014	2015	2016	2017	2018	Date	Growth rate		
									00-'08	08-latest	y-on-y
Net interest revenue	32,739	26,816	27,118	26,410	24,297	23,225	11,515	Jun-18	92%	-34.5%	-2.5%
Net fees and commissions	11,275	10,931	11,257	11,237	11,062	11,751	6,119	Jun-18	79%	-6.1%	2.2%
Trading gains and other revenue	15,493	17,797	17,043	13,885	13,070	11,758	6,442	Jun-18	276%	-29.2%	1.8%
Total revenue	59,507	55,544	55,418	51,532	48,429	46,734	24,075	Jun-18	118%	-27.5%	-0.2%
Operating expenses	-26,951	-26,798	-26,116	-26,261	-26,388	-26,667	-12,956	Jun-18	54%	-12.2%	-3.2%
Personnel expenses	-15,587	-15,108	-14,329	-14,182	-13,943	-13,935	-6,826	Jun-18	54%	-23.7%	0.2%
Other operating expenses	-11,364	-11,690	-11,787	-12,079	-12,445	-12,733	-6,130	Jun-18	54%	5.6%	-6.7%
Pre-provision profit	32,556	28,746	29,302	25,271	22,041	20,067	11,119	Jun-18	226%	-39.7%	3.5%
Loan-loss provisions	-82,547	-21,800	-14,500	-10,699	-8,344	-9,127	-1,566	Jun-18	620%	-79.5%	-72.3%
Other income, net	-37,142	-2,789	-1,739	-3,819	-7,006	-11,586	-1,876	Jun-18	-299%	202.6%	-79.5%
Profit before taxes	-87,133	4,156	13,063	10,753	6,691	-647	7,677	Jun-18	108%	-24.7%	-289.1%
Net attributable income	-73,706	8,790	11,343	9,312	6,003	-3,920	6,654	Jun-18	122%	-27.8%	-207.8%

Source: Banco de España Statistical Bulletin

Table A.3 Relative size and resources of the system. Percentage of GDP, number and percentage change

	2012	2013	2014	2015	2016	2017	2018	Date	Growth rate		
									00-'08	08-latest	y-on-y
Lending to the private sector / GDP	152%	139%	133%	123%	114%	108%	102%	Sep-18	94%	-38.8%	-8.2%
Private sector deposits / GDP	125%	126%	124%	117%	111%	103%	102%	Sep-18	69%	-20.6%	-6.7%
Number of employees	236,504	217,878	208,291	202,961	194,283	192,626	n.d.	Dec-17	14%	-30.8%	-0.9%
Number of branches	38,237	33,786	32,073	31,155	28,959	27,623	27,007	Jun-18	17%	-41.5%	-4.0%

Source: Banco de España Statistical Bulletin

Table A.4 Breakdown of ORS lending, NPLs and NPL ratios by portfolio. Billion euros and percentage change

Lending volume	2012	2012	2013	2014	2015	2016	2017	Date	Growth rate		
									00-'08	08 - latest	y-on-y
Loans to households	756	715	690	663	652	647	655	Jun-18	236%	-20.0%	-0.1%
Of which:											
Housing loans	605	581	558	531	517	503	501	Jun-18	270%	-20.1%	-1.8%
Other loans to households	151	134	132	132	136	144	154	Jun-18	159%	-19.9%	6.1%
Lending to corporates and SMEs	830	719	674	644	605	592	558	Jun-18	237%	-45.1%	-5.8%
Of which:											
Lending to real estate	300	237	200	179	161	145	130	Jun-18	517%	-72.3%	-14.7%
Other lending to corporates and SMEs	530	482	474	465	444	447	428	Jun-18	142%	-21.8%	-2.7%
Total lending to domestic private sector *	1,605	1,448	1,380	1,327	1,276	1,254	1,213	Sep-18	234%	-35.1%	-2.9%
Non-performing loans											
Loans to households	37.0	49.4	46.8	37.0	35.7	35.0	33.8	Jun-18	1062%	39.0%	-5.3%
Of which:											
Housing loans	24.0	34.6	32.6	25.5	24.1	23.6	21.9	Jun-18	1878%	47.8%	-7.9%
Other loans to households	13.0	14.8	14.1	11.4	11.6	11.4	11.9	Jun-18	607%	25.3%	0.1%
Lending to corporates and SMEs	128.4	146.1	124.6	94.2	79.2	60.7	43.5	Jun-18	818%	16.7%	-36.6%
Of which:											
Lending to real estate	84.8	87.8	70.7	50.4	42.4	28.2	16.5	Jun-18	2790%	-38.6%	-52.8%
Other lending to corporates and SMEs	43.6	58.2	53.9	43.7	36.8	32.4	27.0	Jun-18	232%	159.3%	-19.7%
Total lending to domestic private sector *	167.5	197.2	172.6	134.3	116.3	97.7	74.9	Sep-18	808%	18.8%	-28.0%
NPL ratio											
Loans to households	4.9%	6.9%	6.8%	5.6%	5.5%	5.4%	5.2%	Jun-18	246%	73.8%	-5.2%
Of which:											
Housing loans	4.0%	6.0%	5.9%	4.8%	4.7%	4.7%	4.4%	Jun-18	434%	84.9%	-6.2%
Other loans to households	8.6%	11.1%	10.7%	8.7%	8.5%	7.9%	7.7%	Jun-18	173%	56.5%	-5.7%
Lending to corporates and SMEs	15.5%	20.3%	18.5%	14.6%	13.1%	10.3%	7.8%	Jun-18	173%	112.7%	-32.7%
Of which:											
Lending to real estate	28.2%	37.1%	35.3%	28.2%	26.4%	19.5%	12.7%	Jun-18	369%	121.8%	-44.6%
Other lending to corporates and SMEs	8.2%	12.1%	11.4%	9.4%	8.3%	7.3%	6.3%	Jun-18	37%	231.6%	-17.5%
Total lending to domestic private sector *	10.4%	13.6%	12.5%	10.1%	9.1%	7.8%	6.2%	Sep-18	172%	83.1%	-25.8%

(*) Total ORS lending includes total lending to households, total lending for productive activities, non-profit institutions serving households (NPISHs) and unclassified lending. As of January 2014 it includes lending to banking institutions.

Source: Banco de España Statistical Bulletin

Table A.5 New lending transactions. Cumulative annual volume in billion euros and percentage change

Lending volume	2012	2013	2014	2015	2016	2017	2018	Date	Growth rate		
									03-'08	08-'17	y-on-y
Loans to households	63.3	51.2	60.5	75.7	80.6	87.6	73.2	Sep-18	0.7%	-52.9%	16.9%
Of which:											
Housing loans	32.3	21.9	26.8	35.7	37.5	38.9	32.4	Sep-18	-15.6%	-55.4%	14.4%
Other loans to households	31.0	29.4	33.7	40.0	43.1	48.8	40.8	Sep-18	21.3%	-50.7%	18.9%
Lending to corporates and SMEs	484.8	392.6	357.2	392.6	323.6	339.0	270.0	Sep-18	29.2%	-63.5%	7.8%
Of which:											
Less than €250,000	114.4	106.1	112.3	128.7	133.6	143.4	110.3	Sep-18	n.d.	-12.7%	4.6%
Betw een €250,000 and €1million)	31.6	28.3	34.0	36.8	36.3	40.6	32.3	Sep-18	n.d.	-11.8%	10.7%
Corporates (loans > €1mill.)	338.9	258.2	210.3	227.2	152.6	155.1	127.4	Sep-18	43.5%	-65.9%	10.1%
Total new lending flows	548	444	418	468	404	427	343.3	Sep-18	23%	-63.8%	9.6%

Source: Banco de España

Table A.6 Information on resident deposits. Billion euros and percentage change

	2012	2013	2014	2015	2016	2017	2018	Date	Growth rate		
									00-'08	08 - latest	y-on-y
Sight deposits	475	500	563	650	754	857	914	Sep-18	90%	107.4%	10.0%
Term deposits	693	677	597	509	404	286	243	Sep-18	272%	-67.3%	-24.2%
Total retail deposits	1,168	1,177	1,160	1,159	1,157	1,143	1,157	Sep-18	163%	-2.2%	0.5%
Other deposits											
Repurchase agreements	60	64	60	42	32	28	21	Sep-18	-23%	-75.1%	-12.0%
Funds from financial asset transfers	43	37	32	25	23	21	21	Sep-18	14%	-77.1%	-3.8%
Hybrid financial liabilities	20	16	22	17	14	10	8	Sep-18	33%	-72.0%	-27.8%
Subordinated deposits	26	20	16	18	16	1	0	Sep-18	n.m.	-99.2%	-97.5%
<i>Pro-memoria: Deposits in foreign currency</i>	30	30	27	29	28	17	18	Sep-18	739%	-51.7%	-31.9%
Total deposits of domestic resident sector	1,317	1,314	1,289	1,261	1,243	1,203	1,207	Sep-18	159%	-15.7%	-1.3%

Source: Banco de España Statistical Bulletin

Table A.7 Interest rates on lending transactions. Rates in percentages and change in basis points.

	2012	2013	2014	2015	2016	2017	2018	Date	Growth rate (bps)		
									03-'08	08 - latest	y-on-y
Loans. Stock (NDER)											
Loans to households											
Housing loans	2.61	2.11	1.89	1.53	1.30	1.21	1.20	Sep-18	178	-445	-2
Other loans to households	5.78	5.80	6.10	5.98	6.17	6.24	6.28	Sep-18	113	-79	8
Loans to corporates and SMEs	3.47	3.44	2.84	2.38	2.04	1.89	1.81	Sep-18	204	-374	-14
Loans. New lending transactions (APRC)											
Loans to households											
Housing loans	2.93	3.16	2.64	2.31	2.19	2.05	2.22	Sep-18	238	-362	0
Consumer loans	8.32	9.52	8.98	8.43	8.14	8.30	8.80	Sep-18	237	-220	-3
Other	6.23	5.92	4.91	4.28	4.26	4.02	4.28	Sep-18	224	-275	-13
Loans to corporates and SMEs (synthetic average)	3.66	3.57	2.73	2.58	2.30	2.12	2.12	Sep-18	112	-275	-22
Less than €250,000	5.67	5.54	4.56	3.61	3.29	2.93	2.80	Sep-18	n.a.	-175	-27
Between €250,000 and €1million)	4.27	4.03	2.91	2.20	1.91	1.79	1.66	Sep-18	n.a.	-223	-17
Corporates (loans > €1mill.)	3.00	2.83	2.10	2.07	1.63	1.55	1.57	Sep-18	n.a.	-113	-18

NDER: Narrowly Defined Effective Rate (APRC excluding commissions).

APRC: Annual Percentage Rate of Charge.

Source: Banco de España Statistical Bulletin

Table A.8 Interest rate on deposits. Rate in percentage terms and change in basis points.

	2012	2013	2014	2015	2016	2017	2018	Date	Growth rate (bps)		
									03-'08	08 - latest	y-on-y
Deposits. Stock (NDER)											
Households deposits											
Sight deposits	0.21	0.22	0.17	0.12	0.06	0.04	0.03	Sep-18	6.5	-66	-1
Term deposits	2.72	2.08	1.39	0.75	0.30	0.16	0.13	Sep-18	232	-428	-4
Corporates and SMEs deposits											
Sight deposits	0.37	0.35	0.31	0.24	0.15	0.10	0.08	Sep-18	111	-169	-3
Term deposits	2.64	1.93	1.40	0.91	0.65	0.77	0.75	Sep-18	223	-362	4
Deposits. New transactions (NDER)											
Households deposits											
Sight deposits	0.21	0.22	0.17	0.12	0.06	0.04	0.03	Sep-18	30	-66	-1
Term deposits	2.83	1.50	0.66	0.39	0.11	0.08	0.05	Sep-18	225	-413	-5
Corporates and SMEs deposits											
Sight deposits	0.37	0.35	0.31	0.24	0.15	0.10	0.08	Sep-18	111	-169	-3
Term deposits	2.08	1.31	0.51	0.31	0.13	0.16	0.33	Sep-18	146	-314	11

NDER: Narrowly Defined Effective Rate (APR ex commissions).

APR: Annual Percentage Rate

Source: Banco de España Statistical Bulletin

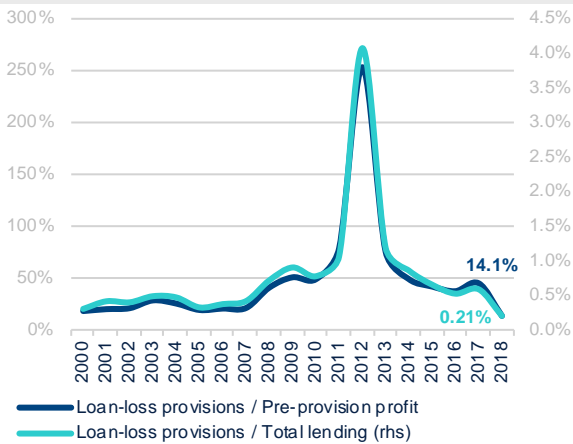
Table A.9 Key ratios

	2012	2013	2014	2015	2016	2017	2018	Date	Growth rate		
									00-'08	08-latest	y-on-y
Productivity											
Business volume* per branch (€000)	76,409	81,761	83,229	83,085	86,975	88,942	89,627	Sep-18	168.2%	25.3%	2.0%
Profit before tax per branch (€000)	-2,279	123.0	407.3	345.2	231	-23.4	568.5	Jun-18	77.5%	28.7%	-296.9%
Efficiency											
Cost-to-Income ratio (Oper. expenses / Total revenue)	45.3%	48.2%	47.1%	51.0%	54.5%	57.1%	53.8%	Jun-18	-29.3%	21.1%	-3.0%
Operating expenses / ATA	0.79%	0.83%	0.88%	0.93%	0.98%	1.01%	0.99%	Jun-18	-43.4%	3.5%	4.9%
Profitability											
RoE	-35.5%	4.1%	4.9%	4.1%	2.6%	-1.7%	5.8%	Jun-18	-3.4%	-43.7%	-205.7%
RoA	-2.55%	0.13%	0.44%	0.38%	0.25%	-0.02%	0.59%	Jun-18	-23.6%	-11.2%	-295.0%
NIM (Net interest rev. / ATA)	0.96%	0.83%	0.91%	0.93%	0.90%	0.88%	0.88%	Jun-18	-29.6%	-22.8%	0.5%
Liquidity											
Loans-to-Deposits (resident sector)	137%	123%	119%	115%	110%	110%	105%	Sep-18	14.8%	-33.6%	-3.4%
Funding gap (Loans - Deposits, EUR bn)	436.8	270.9	220.1	168.3	118.9	110.4	56.3	Sep-18	349%	-91.8%	-42.5%
Funding gap / Total assets	12.8%	9.0%	7.6%	6.1%	4.5%	4.2%	2.2%	Sep-18	57.7%	-89.8%	-41.1%
Solvency and Asset Quality											
Leverage (Shareholders' equity / Total assets)	5.7%	7.7%	7.9%	8.2%	8.6%	8.8%	8.7%	Sep-18	-17.8%	54.6%	-2.3%
Shareholders' equity / NPLs	117%	118%	133%	169%	196%	238%	298%	Sep-18	-74.3%	4.2%	32.4%
Provisioning effort (Loan-loss prov. / Pre-provision profit)	253.6%	75.8%	49.5%	42.3%	37.9%	45.5%	14.1%	Jun-18	121%	-65.9%	-73.2%
Cost of Risk (Loan-loss provisions / total lending)	4.07%	1.19%	0.86%	0.66%	0.53%	0.59%	0.21%	Jun-18	134%	-71.5%	-17.7%
NPL ratio (resident sector)	10.4%	13.6%	12.5%	10.1%	9.1%	7.8%	6.2%	Sep-18	172%	83%	-25.8%
NPL coverage ratio (total)	73.8%	58.0%	58.1%	58.9%	58.9%	60.0%	62.5%	Sep-18	-58.2%	-11.7%	4.0%
NPL coverage ratio (specific provisions)	44.7%	46.9%	46.7%	47.0%	46.2%	42.1%	44.9%	Jun-18	-39.0%	50.2%	14.8%

(*) ORS Credit plus ORS Deposits.

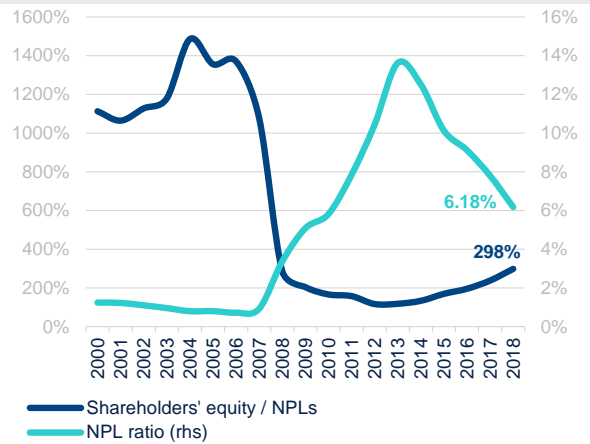
Source: Banco de España Statistical Bulletin

Figure A1.1 Provisioning burden



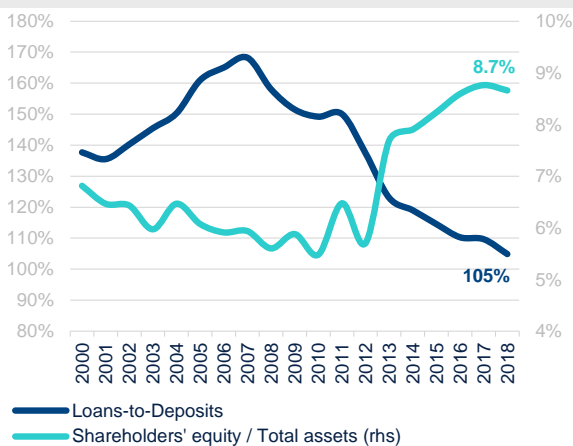
Source: BBVA Research

Figure A1.2 NPLs and Capital as a percentage of NPLs



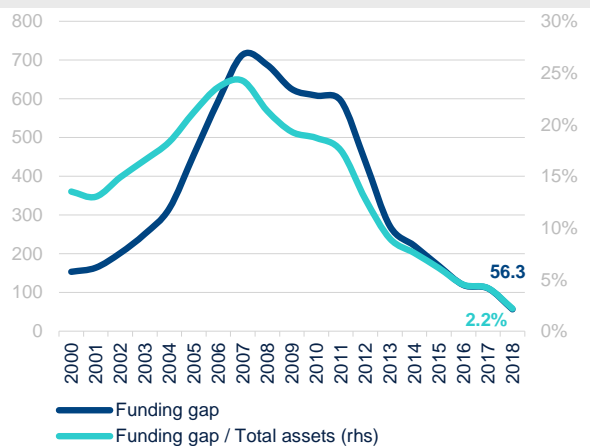
Source: BBVA Research

Figure A1.3 Liquidity and leverage



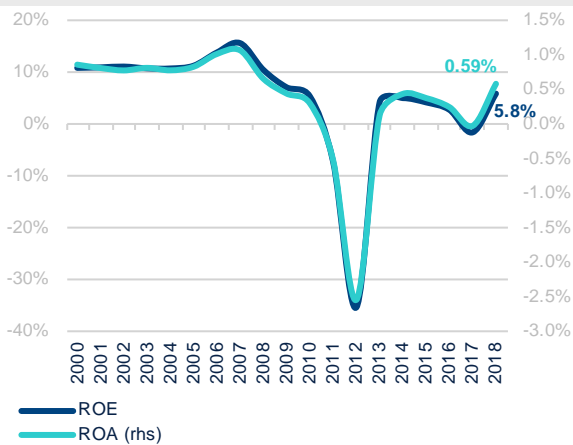
Source: BBVA Research

Figure A1.4 Funding gap (loans less deposits)



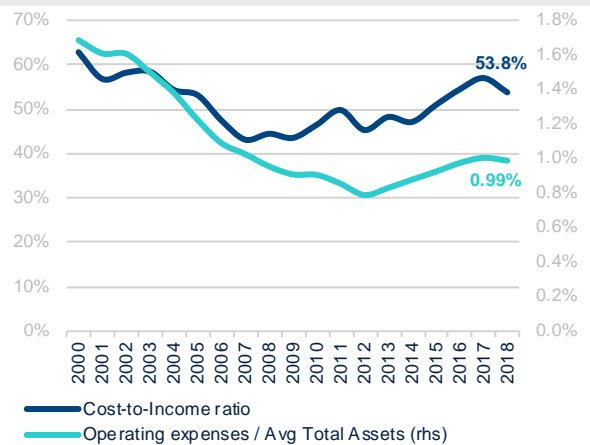
Source: BBVA Research

Figure A1.5 Profitability



Source: BBVA Research

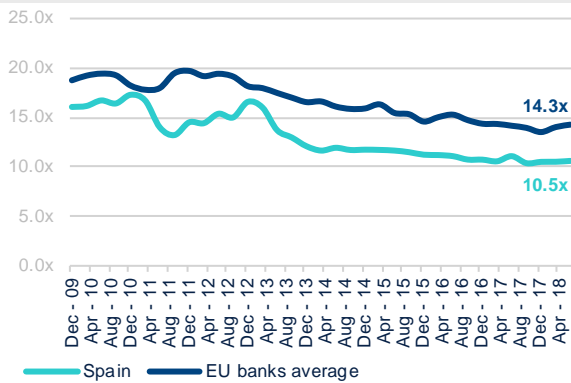
Figure A1.6 Efficiency



Source: BBVA Research

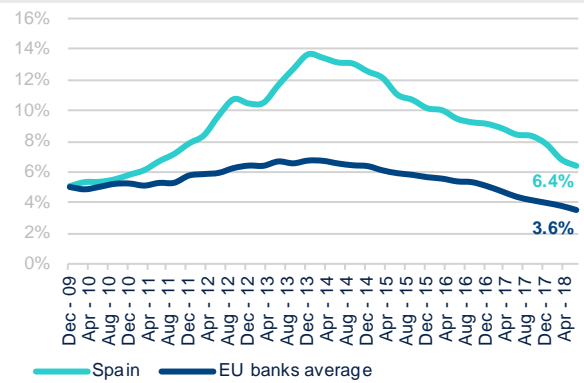
Appendix 2: Trends and developments in the Spanish banking sector

Figure A2.1 Total liabilities / Balance sheet capital



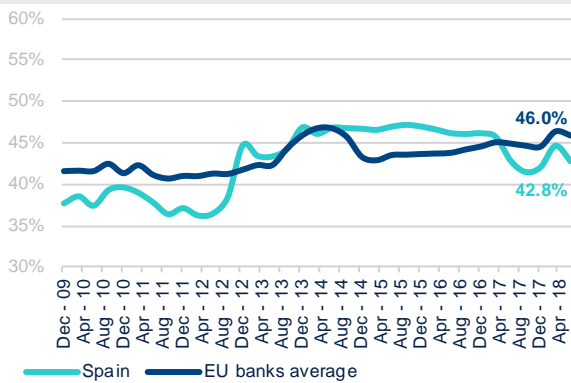
Source: EBA, Banco de España, BBVA Research

Figure A2.2 NPL ratio



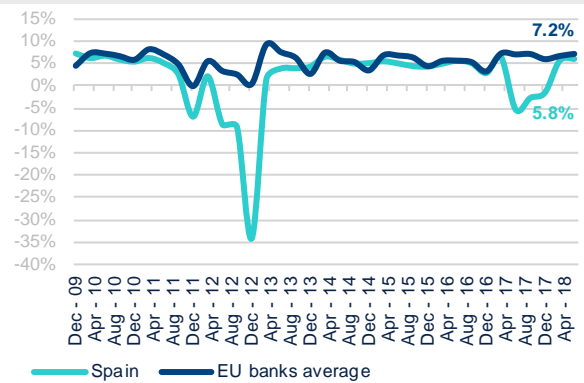
Source: EBA, Banco de España, BBVA Research

Figure A2.3 Coverage ratio (specific provisions only)



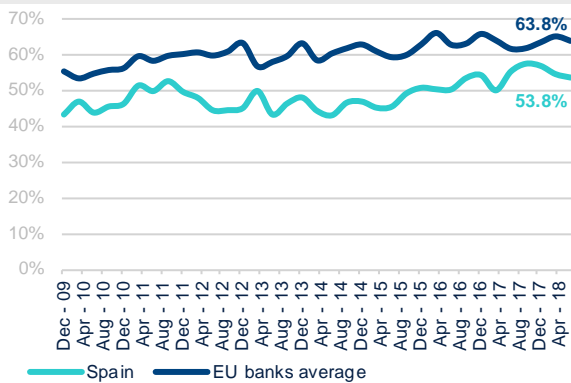
Source: EBA, Banco de España, BBVA Research

Figure A2.4 ROE



Source: EBA, Banco de España, BBVA Research

Figure A2.5 Efficiency ratio



Source: EBA, Banco de España, BBVA Research

Note: the data for European banks on average comes from the EBA's Risk Dashboard, which comprises a panel of 158 major EU banks.

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