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SPAIN

FINANCIAL SECTOR ASSESSMENT PROGRAM

November 2017

TECHNICAL NOTE—IMPAIRED ASSETS AND NONPERFORMING LOANS

This Technical Note on Impaired Assets and Nonperforming Loans for Spain was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed in October 2017.

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October 31, 2017

TECHNICAL NOTE

IMPAIRED ASSETS AND NONPERFORMING LOANS

Prepared By
Monetary and Capital Markets Department

This Technical Note was prepared by IMF staff in the context of the Financial Sector Assessment Program in Spain. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Please also see the Financial System Stability Assessment at http://www.imf.org/~/media/Files/Publications/CR/2017/cr17321.ashx
Further information on the FSAP can be found at http://www.imf.org/external/np/fsap/fssa.aspx

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Glossary

BdE	Bank of Spain (Banco de España)
BMN	Banco Mare Nostrum
CACR	Centralized Analysis of Credit Risk
CET1	Common Equity Tier-1
EBA	European Banking Authority
ECB	European Central Bank
ESM	European Stability Mechanism
EU	European Union
FROB	Fondo de Reestructuración Ordenada Bancaria (Spanish Executive Resolution Authority)
FSAP	Financial Sector Assessment Program
GDP	Gross Domestic Product
IFRS	International Financial Reporting Standards
LSIs	Less Significant Institutions
MdE	Ministry of Economy, Industry, and Competitiveness (Ministerio de Economía, Industria y Competitividad)
MoJ	Ministry of Justice
NPL	Nonperforming Loan
REOs	Real estate owned assets
ROA	Return on Assets
ROE	Return on Equity
Sareb	Asset management company (Sociedad de Gestión de Activos Procedentes de la Reestructuración Bancaria)
SI	Systemic Institutions
SMEs	Small and Medium-sized Enterprises
SSM	Single Supervisory Mechanism
TLTRO	Targeted Long-term Refinancing Operation

EXECUTIVE SUMMARY[1]

The Spanish banking sector underwent significant consolidation in the last five years and made material progress in reducing and provisioning its problem assets.[2] For consolidated operations, the nonperforming loan (NPL) ratio for Spanish banks was 5.6 percent as of end-2016, close to the European Union (EU) average. For banking business in Spain, the NPL ratio declined from its 2013 peak of 13.8 to about 9.2 percent at end-2016. The provisioning ratio of about 45 percent of total NPLs (95 percent if collaterals are factored in) is within EU average levels. Importantly, total problem assets are still about 70 percent of their peak in 2013, and banks hold sizable performing restructured loans.

Despite this progress, several challenges remain that may affect the pace of further reductions in banks' problem assets. The Spanish household debt to disposable income is still around 100 percent, the population and properties are aging, and some macro challenges remain that could affect the ability of banks and Spain's asset management company, Sareb, to further reduce their problem assets by selling units to residents. Moreover, land properties represent about 40 percent of total foreclosed assets, of which two-thirds are not in urban areas, and while private debt-to-GDP has declined below its 2007 peak level, excessive leverage remains in some corporate sectors (construction and real estate) and low-income household segments. The small and medium-sized enterprise (SME) restructuring processes take too long and many end in foreclosure. Restructured loans still account for a sizeable amount (€116 billion as end-December 2016), of which only half is reported as performing.

The size of problem assets varies significantly across banks, and is concentrated in those with exposures to residential mortgages and real estate-related firms, whose NPLs represent about 57 percent of all NPLs.

A tough stance on the implementation of the European Central Bank (ECB) guidance on NPLs is desirable. Ideally, in the case of Spain, the cleanup should be completed before the expiration of the ECB's long-term support. Targets to reduce problem assets should be ambitious and failure to comply should have prudential consequences. Bank of Spain (BdE) should produce its own projections of property prices to assess banks' NPL reduction strategies. Disclosure of progress should be made mandatory under a standardized reporting form. Banks reporting a high migration of performing restructured loans into non-performing should be required to review their policies for loan classification.

FROB (Spanish Executive Resolution Authority) has played a significant role in the restructuring and resolution of the Spanish banking system. Out of 13 merger processes that amalgamated 40 institutions, mostly *cajas*, eight required FROB financial support. These bank

[1] This technical note was authored by Luis Cortavarría and Apostolos Apostolou (both MCM), part of the Spain FSAP 2017 team led by Udaibir Das. The analysis has benefitted from discussions with the staff of the Ministry of Economy and Justice, the Spanish Treasury, the Spain FSAP team, and reviewers at the IMF.

[2] Problem assets include nonperforming loans and foreclosed assets.

restructuring efforts have exposed FROB to cumulated losses over the past eight years that, as of end-2016 account for about €43.5 billion. Going forward, FROB is likely to continue reporting losses, but these should be limited unless are associated with the divestment process of Bankia and Banco Mare Nostrum (BMN) or claims from the acquirers of the resolved banks. The next challenge is ensuring that Bankia, after completing its merger with BMN, is privatized by end-2019. Experiences in other countries have shown that similar processes take no less than 18–24 months, hence the early participation of an investment bank or international consulting firm as an advisor to facilitate the process of privatization will help FROB to successfully exit its Bankia stake.

Sareb was created in 2012 to deal with the management of certain nonperforming assets in bank portfolios of about €106.5 billion (€50.8 billion, after discount). Between 2012–16, Sareb has deleveraged and repaid senior debt of about 22 percent and 20 percent, respectively, and covered operating and interest expenses on senior debt. This has been achieved through effective asset management approach (including transformation of loans into real estate owned assets (REOs), loan collection, sales, and completion and disposal of unfinished properties).

So far, Sareb has met quite well its objectives and its revised business strategy appears to be well designed, but its cashflow faces implementation risks through 2027 and more immediately over the next four to five years, including high sensitivity of Sareb's cash flow projections to asset price and loan recovery assumptions. Further challenges include high operating and financial expenses, tough competition from banks, the need to transform loans into REOs and land into new developments, and potential market pressures down the road to prove its viability. Evolving customers' preferences as Spanish households could also potentially change their preference to renting a home rather than buying.

Sareb's performance today remains critical in preserving financial stability going forward. It will be vital to ensure that its remaining liabilities (about 4 percent of GDP) remain manageable and do not become a source of macrofinancial risk. The BdE should challenge Sareb's cashflows projections based on its internal macroeconomic projections (including real estate prices, credit growth, and unemployment), as well as adverse scenarios. On those basis, a tripartite group (MdE, FROB, and Sareb)—comprised by members independent of its Monitoring Commission—should be appointed to objectively analyze and identify any needed mid-term correction of Sareb's business plans.

RECOMMENDATIONS

Table 1. Key Recommendations		
	To address crisis legacy issues	
1	Enforce implementation of the ECB guidance on NPLs, including promoting banks' disclosure of targets and progress.	SSM,BdE
2	Improve recovery of viable businesses by enabling the stay and involvement of public creditors in all pre-insolvency processes and enhancing the OCAP process for SMEs; strengthen commercial courts by resourcing them better.	MoE, MoJ
3	Review, as a priority, Sareb's medium-term financial outlook based on adverse scenarios; set up an independent tripartite committee (BdE, MoE, and FROB) to work out any needed mid-course corrections.	MoE, BdE, (FROB)
4	Ensure the early participation of a financial advisor to facilitate the process of privatization of the merged Bankia-BMN entity to facilitate FROB's successful exit from its stake.	FROB

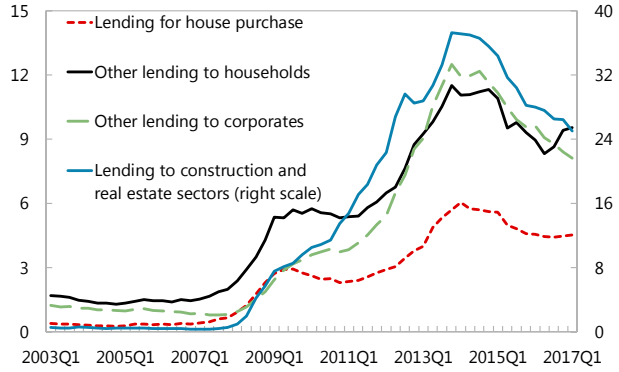
INTRODUCTION

1. In 2009 the Spanish banking system started facing problems mostly due to asset quality deterioration in the former Savings Banks (*Cajas de Ahorros*). House prices had begun to fall in 2007Q4, affecting the real economy through wealth effects and investment and employment dynamics. The housing market featured sustained house price increases of around 200 percent over the two decades preceding the crisis, fueled by strong growth in construction, and an excessive expansion of real estate (particularly by savings banks—cajas).

2. In this context, FROB was created to restructure the financial sector and fund the recapitalization or exit of troubled institutions. The government and the deposit insurance guarantee scheme of banks, savings & loans, and cooperatives contributed to the establishment of FROB by injecting fresh resources by €6.7 billion and €2.3 billion, respectively. FROB is also entitled to issue debt guaranteed by the government, borrow from the government, and convert such borrowing into equity in case of need. During 2009–12 FROB supported the financial system with two programs, FROB 1 and FROB 2, that amounted to €15 billion.

3. However, asset quality continued to deteriorate and reached 10.8 percent in August 2012, exceeding the highest Spanish NPL ratio in two decades.[3] More specifically, in mid-2012 the level of the banks' NPLs reached 16.8 percent and 3.8 percent for corporate and household loans granted in Spain, respectively. A high concentration of troubled loans was in construction and real estate development, and household loans other than mortgages, with 27 percent and 7.5 percent of past due loans, respectively.

Nonperforming Loans, 2003-17
(In percent of total loans)



Sources: BdE

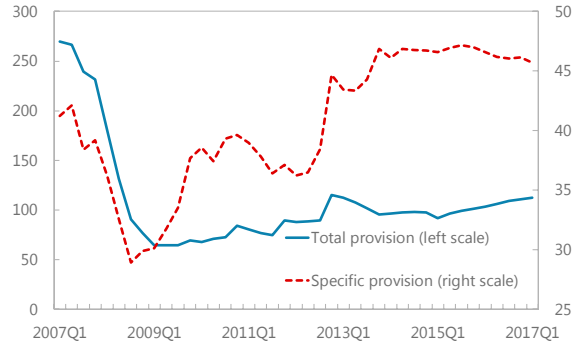
4. Additionally, in the same period, loan provision coverage on NPLs dropped below 60 percent from an historic high of 280 percent. The concurrence of two of the most pernicious bank diseases, fast growing NPLs and low profitability, undermined banks' ability to continue building buffers against loan losses, as they had done in the early 2000s. Importantly, capital ratios declined in 2012 to 9 percent (about 10 percent after excluding banks under FROB support). In this context, the government issued Royal Decrees 2/2012 and 18/2012 to enhance provisioning levels of loans and foreclosed assets related to real estate sector. It aimed force banks to recognize losses

[3] Following Banesto's resolution in December 1993, the level of NPL of the Spanish banking system reached 8.6 percent in 1994. The banking system took 4 years in a context of GDP growth of 15 percent and credit growth of 55 percent to bring NPL down from 8.6 to 2 percent.

on such exposures and facilitate the removal of problem assets from banks' balance sheet through sales to a majority privately owned asset management company.

5. Against this background, the Spanish government made an official request for financial assistance of the European Stability Mechanism (ESM). The reform program of up to €100 billion, aimed to support further bank recapitalization and facilitate financial consolidation. Two major restructuring measures were adopted under the program:

Provisioning of banks
(In percent of nonperforming loans)



Sources: BdE

- **Public recapitalization.** Based on an independent valuation, the BdE identified that 10 banks required additional capital of €41 billion (this sum is net of some capital savings, including mandatory subordinated liability exercises). While two banks managed to find a private solution, the remaining eight institutions received public aid for about €39 billion (FROB 3). This operation was financed by the ESM.

- **Troubled assets purchase.** Problem assets amounting to €106.5 billion were acquired for €50.8 billion (52 percent discount) from the eight above mentioned institutions by Sareb in exchange for securities guaranteed by the Spanish state. Sareb was created with state and private participation, with private investors and FROB holding 55 and 45 percent of Sareb' shares, respectively.

6. The combination of earlier FROB initiatives and measures under the ESM program led to a major and successful consolidation of the Spanish financial sector. While the financial crisis was systemic, the core banks were not substantially affected as the financial distress was largely concentrated in the *cajas*. The authorities were successful in merging failing institutions into new banks and transferring most of them to private investors, although two remained under FROB's ownership (Bankia and Banco Mare Nostrum).

7. This note discusses progress made by Spanish authorities, banks, and institutions in the management of legacy assets and contingencies associated with the financial crisis since 2012. Broadly, as of end-December 2016, the banks, Sareb, and FROB still hold in their balance sheets assets associated with the recent banking crisis for around €303 billion, €83 billion, and €11 billion, respectively. FROB also holds contingencies for €1.4 billion related to guarantees against legal losses and some asset valuation issues given to the institutions that acquired failing banks to facilitate resolution (Table 2).[4] The discussion of the legacy assets and FROB contingencies is organized in three sections as follows:

[4] The calculations for NPLs, foreclosed assets, and deferred taxes are done using data from bank reports. Sareb senior bonds outstanding are derived from Sareb's annual report. The asset protection programs, investments in Bankia, BMN, and other banks are done using data from 2015 FROB's annual report and responses of FROB staff to FSAP questionnaires.

- Progress made in the banks' clean-up of NPLs and foreclosed assets since 2012;
- The financial situation of the FROB's group, status of state legacy contingencies, and divesting plans; and
- Progress made by Sareb in asset recovery and the main challenges going forward. This section also helps understand the way that the Sareb bonds held by banks are expected to be repaid.

Table 2. Legacy Assets and State Contingencies, end-2016
(in billion of euros, unless indicated otherwise)

Item	Bank Assets	Sareb Assets[1]	FROB	
			Investments	Contingencies
NPLs (Gross, Spain only)	112.3	58.1		
Foreclosed assets (Gross, Spain only)	79.2	24.6		
Sareb bonds	41.6			
Deferred taxes	70.0			
Asset Protection Programs				1.4
Bankia - 66% FROB control			9.2	
BMN - 65% FROB control			0.5	
Sareb-shares and subordinated debt			1.5	
	303.0	**82.7**	**11.2**	**1.4**

[1] Sareb's net NPLs and foreclosed assets account for € 28.1 and 11.9 billion, respectively.
Source: BdE, Sareb, FROB and staff estimates.

PROGRESS IN BANKS' CLEAN-UP OF NPLS AND FORECLOSED ASSETS

8. Spanish banks have made significant progress in reducing and provisioning their problem assets. For consolidated operations, the NPL ratio for Spanish banks was 5.6 percent as of end-2016, close to the EU average. For banking business in Spain, the NPL ratio declined from its 2013 peak of 13.8 to about 9.2 percent at end-2016. The provisioning ratio of about 45 percent of total NPLs (95 percent if collaterals are factored in) is within EU average levels. Importantly, total problem assets are still about 70 percent of their peak in 2013, and banks hold sizable performing restructured loans.

9. Several factors have contributed to the progress made so far in the reduction of the banks' NPL. These include the following:

- **Economic recovery.** GDP growth turned the corner around end-2013, benefiting from confidence enhancing measures, reforms, external tailwinds, and cheap ECB funding—targeted long-term refinancing operations (TLTROs)—and it has exceeded the euro area average since 2014Q2. The economy expanded by 3.2 percent annually during 2015–16, up from 1.4 percent in 2014, unemployment while still high at 19 percent, has dropped rapidly, helping banks to work towards restructuring loans, foreclosing loan collateral and selling off a portion of their

troubled loans assets and NPLs. Going forward GDP is expected to slow down around 2 percent in the medium term.

- **Bank lending rates have decreased**. Recovery of market confidence in the overall banking sector has helped banks reduce their lending rates and expand loan volumes even as overall credit growth remains negative.

- **Efforts made by banks.** Banks are actively working in restructuring loans, foreclosing loan collateral and selling off a portion of their troubled loans assets. Most banks have developed tools to manage their NPLs (including IT and proper reporting to identify early potential NPLs) and some of them have contributed to place Spain as one of the Europe's most active loan sale market (between 2014–2016 five institutions sold almost €50 billion of problematic assets, of which four banks explained most of these transactions).[5]

10. The European and Spanish authorities have also taken important steps to enable the clean-up of legacy assets (Box 1 and 2). In addition to the adoption of a more conservative loan classification approach in 2013, three recent measures may help enhance further loan classification and provisioning:

- **The review of the BdE accounting rule that aims to transition toward the adoption of IFRS 9.** Recent amendments to the BdE accounting rule for credit risk losses (Circular 4/2016) that *inter alia* aim to foster the reduction of foreclosed assets, aligning their accounting value with their updated market value (fair value minus costs to sell) and requiring banks to value their real estate portfolios more frequently, especially during economic downturns and at least once a year for impaired loans (see Box 1).

- **The establishment at the BdE in 2016 of a specialized group named "Centralized Analysis of Credit Risk" (CACR).** A database on residential properties is now complete and holds information on nearly 5 million units and a value of €420 billion. Data collection on land appraisals is currently underway, and information on about 120,000 properties have been stored at the BdE database. Based on this new database, the CACR is developing supervisory tools to compare the valuation of loan collateral and foreclosed assets across banks.

- **Publication in early 2017 of ECB guidance to banks on NPLs, which includes different actions aiming to further reduce banks' legacy assets.** The guidance is applicable to all significant institutions (SIs) supervised directly by the Single Supervisory Mechanism (SSM), including their international subsidiaries, but chapters on NPL strategy, governance, and operations are of most relevance for banks with high levels of NPLs (above EU average level). The ECB document also includes international best practices on NPL recognition, NPL impairment measurement and write-off policies, and collateral valuation (Box 2), in line with the current BdE's circular.

[5] Please see *Deloitte Deleveraging Europe 2015–2017*.

11. Despite the progress made, several challenges remain that may affect all banks' ability to effectively reduce problem assets. These include: market capacity to absorb further purchases, stress still prevailing in some corporate sectors, flaws in the SME loan restructuring process, and the presence of a significant amount of restructured loans:

- **Household debt is still around 100 percent of disposable income and population is aging.** This situation limits the number of potential buyers of properties. In 2014, 80 percent of households already owned their main residence, and 70 percent of them were over 45 years old (up from 65 percent in 2008). Demand from nonresidents may not reverse this trend materially.

- **Properties are aging.** While no information is available on the age of properties underlying loan collateral and foreclosed assets, these could be between 8-10 years on average, if we assume that most of loans that became problematic are those disbursed during 2005–07. Older properties tend to be more difficult to dispose, require higher maintenance fees, and have lower recovery value. Importantly, only about 26 percent of foreclosed assets are comprised of buildings and other completed real estate properties.

- **Land properties are by far the most common foreclosed asset held by banks.** They represent 40 percent of total foreclosed assets, of which two thirds are not urban properties.

- **Stress in two sectors.** While private debt-to-GDP has declined by 50 percentage points below its 2007 peak level, excessive leverage remains concentrated in some corporate sectors (construction and real estate) and low-income household segments.

- **Slow restructuring of SME loans.** During 2016 the NPL ratio for SMEs declined more than for larger corporations, but it remains quite high (18 percent), suggesting that debt restructuring for this sector could take longer than expected. There is a risk that either these exposures be left to be resolved by economic recovery, or end with collateral foreclosure (as some market participants have pointed out). SMEs dominate employment and private sector activity in Spain, are more dependent on bank financing, and may need larger restructuring to adapt to a more demanding environment than before the crisis.

- **Restructured loans still account for a sizeable amount.** In December 2016, total restructured credit to the resident private sector amounted to €116 billion, of which almost 50 percent was reported as performing. Moreover, banks report a high redefault rate of restructured loans.

- **Macro challenges.** Spain has a large negative net international investment position, mainly explained by government and corporate debt, even with a current account surplus in recent years. Importantly, despite authorities' efforts to improve the macro-financial and fiscal conditions, challenges remain as net IIP position was about 86 percent of GDP and the sovereign-bank nexus is strong.

Box 1. Bank of Spain: Revised Regulation on Credit Risk Analysis and Provision

Amendments made to Annex IX made by Circular 4/2016 (effective since October 1, 2016). /1 The main objective was to include recent developments in banking regulation and best practices identified in credit risk management and accounting. They aim to:

- Reinforce loan loss provision practices by strengthening credit risk management and classification, and accounting basis of loan collateral;

- Initiate a transition towards the adoption of IFRS 9 in 2018. While the "incurred loss" accounting model is yet to be replaced by the "expected loss" the new requirements seek to guide both the development of the banks' own methods for individual estimates of specific provisions and of internal methods for collective estimates of specific and generic provisions. Meanwhile banks may continue using an alternative approach to calculate provisions over the unsecured portion of loans, based on minimum ratios defined by BdE between 3-21 months (before these amendments banks were required to fully provision the unsecured part of loans no later than one year, without regard to the different credit risk profile inherent in each portfolio, please see figure below).

Doubful in arrears (Collective)	3m - 6m	6m - 9m	9m - 12m	1 yr - 15m	15m - 18m	18m - 21m	More than 21m
Prior Annex IX	25%	50%	75%	100%	100%	100%	100%

Alternative solutions	3m - 6m	6m - 9m	9m - 12m	1 yr - 15m	15m - 18m	18m - 21m	More than 21m
Non finance corporations and households							
Specialized financing							
Construction and real estate development, including floor	40%	55%	70%	80%	85%	95%	100%
Buildings	45%	60%	70%	80%	85%	95%	100%
Other specialized financing	20%	30%	30%	55%	80%	85%	100%
Non specialized financing							
Corporate	30%	70%	80%	90%	95%	100%	100%
SMEs	40%	55%	65%	75%	80%	90%	100%
Individual entrepreneurs	25%	40%	55%	70%	80%	90%	100%
Households (excluding debt of individual entrepreneurs)							
Mortgage	20%	30%	40%	55%	65%	80%	100%
First residence (LTV<80%)	20%	30%	40%	55%	65%	80%	100%
'First residence (LTV>80%)	20%	30%	40%	55%	65%	80%	100%
'Non primary residence	20%	30%	40%	55%	65%	80%	100%
Consumer	60%	70%	85%	90%	95%	100%	100%
of which: credit cards	60%	70%	85%	90%	95%	100%	100%
Other	60%	70%	85%	90%	95%	100%	100%

- Induce banks to discount maintenance and sell costs from loan collateral and foreclosed assets' appraisal values based on their recent experience as regards to time that it took to dispose units, market prices and volume. Alternatively, banks must discount from collateral and foreclosed asset valuation a set of specific factors defined by BdE that vary between 20-60 percent.

- Align BdE's loan classification categories with those of the European Banking Authority (EBA) by eliminating the substandard rating and introducing a new performing category denominated "normal under special monitoring". Additionally, borrowers that show weaknesses although their loans are yet to be past due will also be considered doubtful, as the previous versions of Annex IX already stated. Thus, loans now can be classified as normal, normal under special monitoring, doubtful and loss.

- Involve the banks' board of directors and internal control function in the approval of accounting policies, and monitoring the implementation of principles and requirements established in Annex IX, including as regards to validation of internal methods for collective provisioning—the internal control function is expected to check quality and consistence of databases that support these methods.

Additionally, these new requirements to banks seek to ensure that:

- Accounting methodologies are not "black boxes", but should be comprehensible and offer results that are understandable and realistic. Institutions should establish periodic back testing and benchmarking procedures to assess the accuracy of their provisioning estimates by comparing them with actual losses observed.

- Collateral valuation policies are sound and effective so loan provision is not understated. Internal audit departments are expected to revise regularly their institutions' databases on actual transactions. The new requirements include minimum frequencies for updating the value of collateral to be recorded as an effective means of mitigating credit risk, which are more demanding in case of doubtful and loss loans.

Source: BdE

/1 On July 1, 2017 Royal Decree 638/2017 was issued to complement the BdE accounting rules of Annex IX of Circular 4/2016.

Box 2. Guidance to Banks on Nonperforming Loans

The guidance is applicable to all significant institutions (SIs) supervised directly by the Single Supervisory Mechanism (SSM), including their international subsidiaries, but chapters on NPL strategy, governance and operations are of more relevant for banks with high levels of NPLs (above EU average level). In the document, NPLs and non-performing exposures—including NPLs, foreclosed assets—are used interchangeably. It could be divided in two sections: (i) recommendations on NPL management and restructuring; and (ii) best accounting practices on NPL recognition, provisioning and valuation of loan collateral and foreclosed assets. **The summary below covers only section one and comprises NPL strategy, governance and operations and forbearance. The ECB guidance includes:**

NPL strategy. Banks are expected to develop plans to reduce NPLs over realistic but sufficiently ambitious time-bound horizon with clear NPL reduction targets. Broadly, this process is comprised of four steps:

- ***Assessing the operating environment.*** This refers to the assessment of banks' internal capabilities to effectively manage and reduce NPLs over a defined time horizon, including scale and drivers of the NPL, outcomes of NPL actions taken in the past, and operational capacities—processes, tools, data quality, IT/automation, staff/expertise, decision making, and internal policies. In completing this assessment banks are also urged to factor in external conditions and operational environment (including macroeconomic conditions and market expectations), and capital implications as banks should remain well capitalized in the process of cleaning-up their NPLs.
- ***Developing the NPL strategy*.** Building on the above mentioned assessment banks should develop a strategy that should contain: (i) *Options,* such as hold/forbearance strategy, active portfolio reductions, change of exposure type (e.g., debt to equity swapping, asset foreclosure or collateral substitution) and legal options (including out of court solution)—these options should also include a discussion on pros and cons; and (ii) *Targets* in terms of development of operational capabilities (qualitative) and projected NPL reductions (quantitative) over the short, medium and long-term time horizons;
- ***Operational plan.*** It should clearly define how banks will operationally implement their NPL strategy over a time horizon of at least one to three years including clear time-bound objectives and goals, activities to be delivered on a segmented portfolio basis, staffing any necessary changes in the organizational structure of the bank (e.g., timetable and goals, staffing and resources, required technical infrastructure, budget, activities by portfolio type); and
- ***Embedding the NPL strategy*** into the entire organization at all levels, including strategic, tactical and operational. Banks are expected to consult with their Joint Supervisory Teams, their NPLs strategies and those holding NPLs above EU levels must present them to their Joint Supervisory Teams in the first quarter of each year.

NPL governance and operations. Appropriate governance structure and operational set-up, is key for banks to address their NPL issues in an efficient and sustainable way. In this direction, the guidance stresses several aspects, including:

- ***Steering and decision making*,** management should approve annually and regularly review their NPL strategy and operational plan, and at least quarterly compare actual execution against plan;
- ***NPL operating model***. Use of workout units, independent from loan origination, is recommended, and that these should be different for the different phases of the NPL life cycle. Additionally, for sound NPL analysis, banks are expected to keep granular data up to date, for which ensuring the existence of a robust and secured IT is key.
- **Internal control framework.** While effective control should primarily rest on management, a bank needs to establish independent review functions to ensure that management is operating as expected.
- **NPL monitoring,** the monitoring system should be based on NPL targets approved in the NPL strategy and a set of key performance indicators to measure progress (including on customer engagement and cash collection).
- **Early warning mechanisms/watch lists.** Bank managers and parties responsible for monitoring loans should receive periodic reports on early warning indicators (e.g., on migration of NPLs from one level of arrears to another).

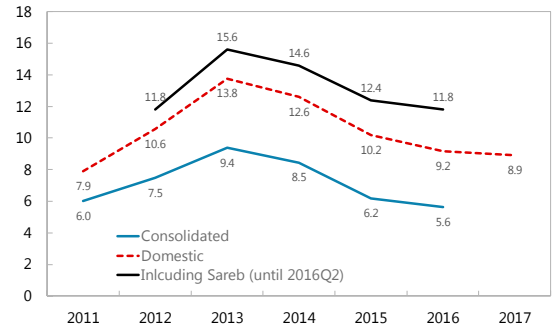
Forbearance. The supervisory expectation is that banks should implement well-defined forbearance policies aligned with the concept of viability and recognize in a timely manner those borrowers who are non-viable**.** Key aspects of this section include: (i) *Forbearance options and their viability,* the ECB provides guidance on how to distinguish between viable and non-viable forbearance; and (ii) *Affordability assessments,* before granting any forbearance measures, the lending officer responsible should conduct a complete assessment of the borrower's financial situation; and (iii) Supervisory *reporting and public disclosures***.** Supervisors expect from banks consistent disclosure on forbearance, especially on key areas including credit quality of forbearance, quality and effectiveness of forbearance and ageing profile of forbearance on a regulatory portfolio basis. To this end, a estandarizad template is provided.

Figure 1. Banking Sector's Progress and Recovery

The sector's NPL ratios have been reduced….

NPL to total loans

(percent)

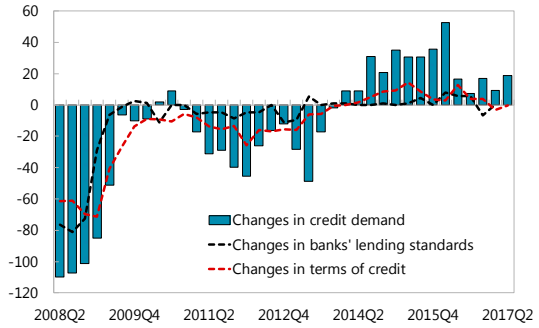


Sources: Financial soundness indicators, Sareb and bank reports

Credit to households has turned positive…

Lending Survey: Lending to Households, 2008-17

A positive value indicates changes consistent with credit expansion; and vice versa

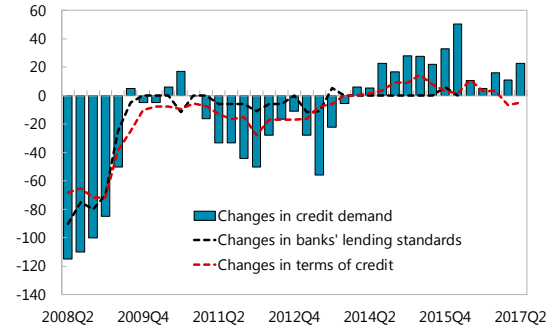


Sources: BdE

As is credit for house purchase….

Lending Survey: Lending for House Purchase, 2008-17

A positive value indicates changes consistent with credit expansion; and vice versa

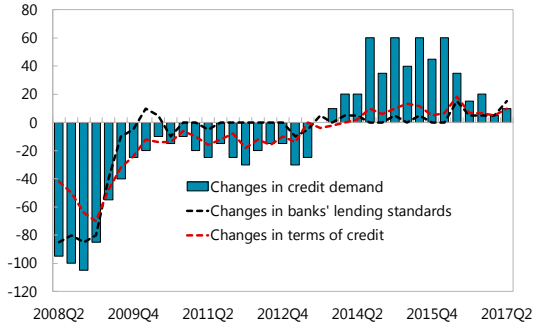


Sources: BdE

And credit for consumption…

Lending Survey: Lending for Consumption, 2008-17

A positive value indicates changes consistent with credit expansion; and vice versa

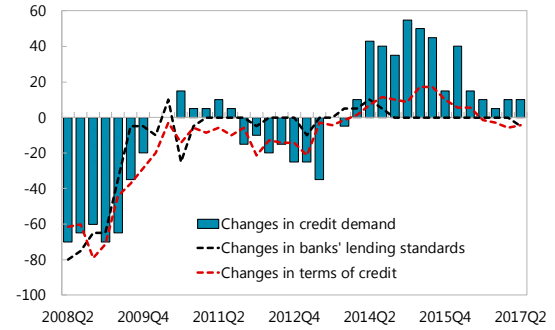


Sources: BdE

Corporate lending is recovering…

Lending Survey: Lending to Corporates, 2008-17

A positive value indicates changes consistent with credit expansion; and vice versa

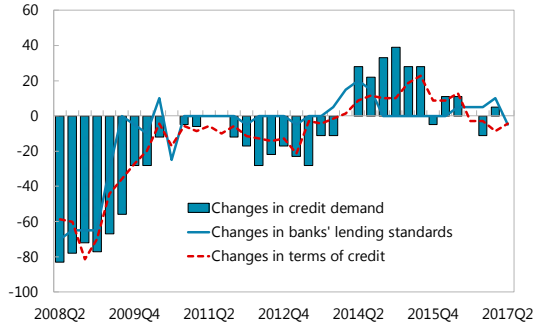


Sources: BdE

As is credit to SMEs….

Lending Survey: Lending to SMEs, 2008-16

A positive value indicates changes consistent with credit expansion; and vice versa



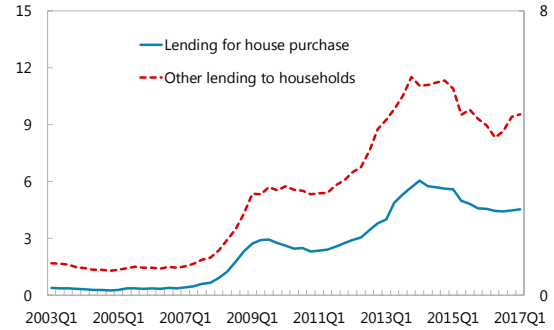
Sources: BdE

Sources: Bank of Spain; EBA, 2016 Transparency Exercise; ECB, Consolidated Banking Data; IMF, Financial Soundness Indicators database and International Financial Statistics; and IMF staff estimates.

Figure 2. Bank Lending Rates Have Decreased with Lower NPLs

As household NPLs have decreased….

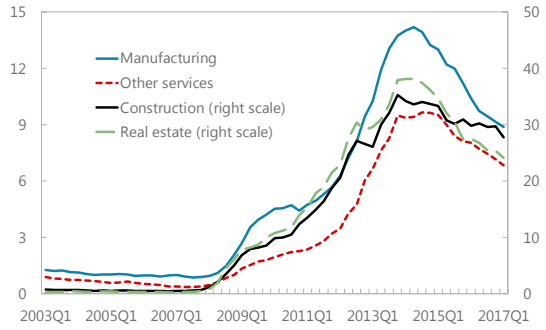
Nonperforming Loans, 2003-17
(In percent of total loans)



Sources: BdE

And corporate NPL have been reduced…

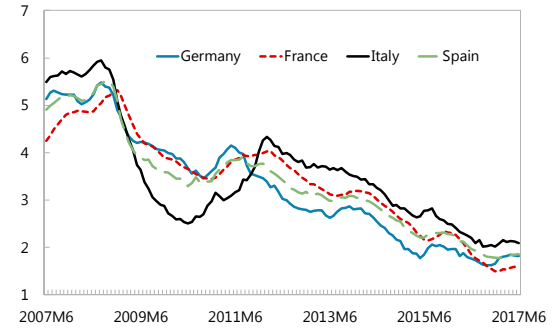
Corporate Nonperforming Loans, 2003-17
(In percent of total loans)



Sources: BdE

Household lending rates have come down….

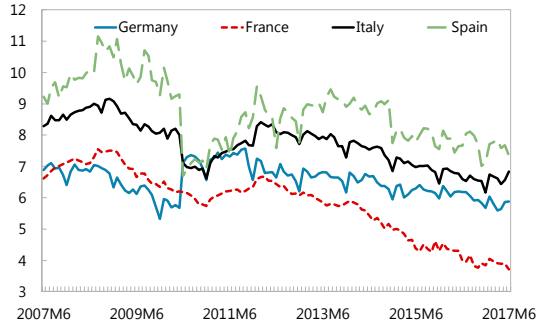
Lending Rates for Housing Loans, 2007-17
Based on new lending (in percentage points)



Sources: ECB

Consumer lending rates have come down…

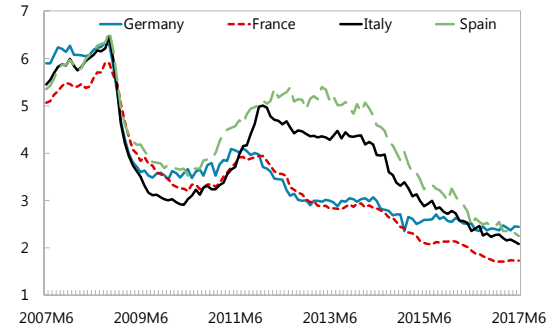
Lending Rates for Consumer Loans, 2007-17
Based on new lending (in percentage points)



Sources: ECB

Small corporate lending rates have been reduced…

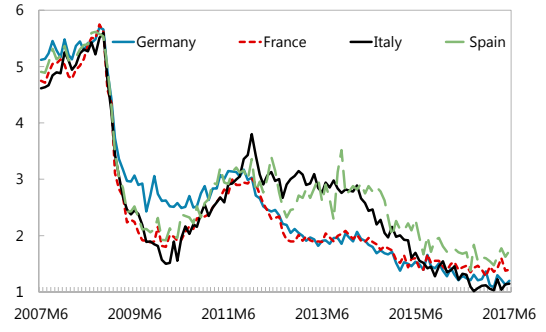
Lending Rates for Small Corporate Loans, 2007-17
Based on new lending up to 1 million euros (in percentage points)



Sources: ECB

And large corporate rates have come down….

Lending Rates for Large Corporate Loans, 2007-17
Based on new lending more than 1 million euros (in percentage points)

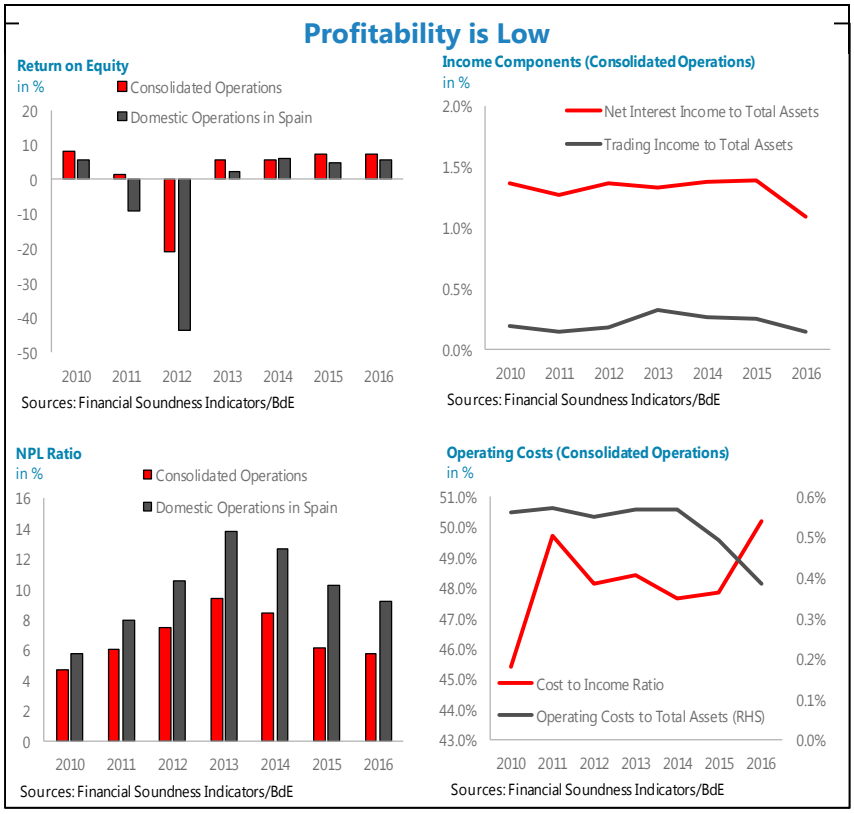


Sources: Segoe UI - Size 18

Sources: Bank of Spain; EBA, 2016 Transparency Exercise; ECB, Consolidated Banking Data; IMF, Financial Soundness Indicators database and International Financial Statistics; and IMF staff estimates.

- **The size of problem assets varies significantly across banks**, and is concentrated in those with exposures to residential mortgages and real estate-related firms, whose NPLs represent about 57 percent of all NPLs. The amount of reserves and capital to cover potential losses weigh on these banks profitability and their high level of loan to deposit ratios, makes this group more susceptible to market risks.

12. More broadly, profitability has remained subdued partly due to the low interest rate environment but also to high NPLs hindering some banks' ability to provision. The NPL ratio appears to be a drag on the profitability of banks. The cost to income ratio is negatively related to profitability as it is inversely related to cost efficiency. As expected, the more efficient banks are found to be more profitable. NPL ratios influence profitability negatively, as unproductive assets on the balance sheet are costly to maintain and drive up provisions. Stronger solvency position, measured by Tier 1 capital ratio, tends to be associated with better performance in both returns on assets and returns on equity.



13. Therefore, despite progress made, the completion of the banks' task of dealing with problem assets still requires further efforts. Importantly, while recent measures adopted to consolidate the banking sector have reduced the asymmetry between banks as regards the pace of cleaning of their problem assets, some small institutions still need to continue working hard to fully catch up with the overall progress made by larger banks.[6] In particular, all banks need to take advantage of the ongoing economic growth and still favorable low interest rates to accelerate the process of removing their "toxic" assets from their balance sheets within the next three to five years.

14. Given the challenges that lie ahead, the Spanish authorities and SSM need to continue promoting and monitoring the banks' clean-up process by building on their recent measures. In this process, two ongoing steps appear critical:

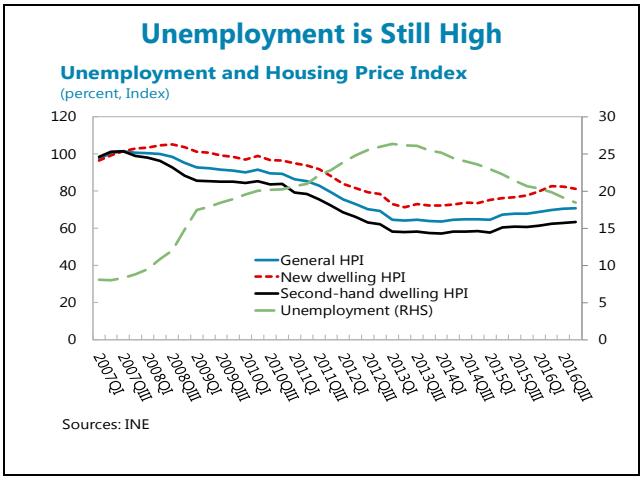
[6] See Appendix I for various measures of banks progress in dealing with problem assets and measures of bank health as of 2016Q2.

- **The proper implementation by banks of Annex IX of the Circular, together with the upcoming adoption of IFRS 9, should provide the basis for ensuring that banks recognize losses on NPLs and foreclosed assets on a timely basis.** This BdE accounting rule pushes for a more conservative application of accounting standards and *inter alia* aims to foster stricter valuation of loan collateral and foreclosed assets. Additionally, it will be critical to support this work with the expected (i) verification of the consistency across banks of their appraisals of loan collateral and foreclosed assets (CARC); and (ii) the review of the banks' internal methods for collective provisioning.

- **Full adoption of the ECB Guidance to banks on NPLs,** with emphasis on banks' submission of their NPL strategies and targets, and loan restructuring policies to ensure only viable borrowers are being restructured.

15. While the two steps above are likely to address/factor in most of the challenges described in the previous section, a tough stance by the authorities as regards the banks' compliance with their NPLs strategies will be important. To this end, it will be critical:

- **Challenging the banks' strategies.** While banks are set to submit their plans and targets to deal with NPLs and foreclosed assets, it will be important for the authorities to take a holistic view about the potential market demand and property price developments, to ensure that banks' plans are evaluated using independent information. This view about an expected baseline scenario for land development and property price should include macroeconomic variables such as the unemployment rate, which would be useful to challenge optimistic real estate price developments.



- **Ensuring that the most problematic banks continue to be addressed first.** The SSM has already followed a supervisory review approach to foster more active resolution of NPLs by placing banks with high NPLs under enhanced monitoring and requiring the submission of their NPL strategy for proper supervisory assessment. This priority criteria could also consider banks that have higher Texas ratio (after including foreclosed assets), weaker profitability, and high reliance on ECB funding.

- **Encouraging a firm pace of bank balance sheet cleanup.** The cleanup should be completed before the expiration of the ECB's long-term support. Targets to reduce problem assets should be ambitious and failure to comply should have prudential consequences.

- **Regularly disclosing detailed information on progress made by individual institutions would help accelerate the clean-up of legacy assets and increase market transparency and discipline**.[7] Quarterly and easily accessible disclosures could include NPLs and foreclosed assets by asset type (e.g., corporate, SMEs, mortgage, and consumer lending) along with their level of provision, NPL trends, and segregation of restructured performing and nonperforming loans by asset type. This regular disclosure could be complemented by disseminating summary information, under a standardized reporting form, on the banks' NPL management strategy, goals, and targets, to keep investors and regulators informed on the banks' progress toward reducing their legacy assets. Additionally, consideration could be given, for supervisory purposes, to isolating in the banks' balance sheet and income statement, all accounts related to the independent unit managing NPLs (including NPLs, foreclosed assets, provisions, and operating expenses), to separate and facilitate the monitoring of the performing part of bank portfolios.
- **Fostering further loan restructuring.** BdE should assess whether the overall framework and banks' internal policies to restructure SME loans are suitable to address current needs. Thus, besides dealing with the recommendations on how to improve the insolvency and out of court regime, if the authorities were to find that operational loan restructuring procedures at banks explain in part the still high level of the SME's, they should consider passing detailed guidelines on standardizing such restructuring process. Additionally, banks reporting high redefault rates of restructured loans should be required to introduce changes to their internal loan restructuring policies and procedures.

FINANCIAL SITUATION OF FROB, CONTINGENCIES, AND DIVESTMENT PLANS

16. FROB has played a significant role in the restructuring and resolution of the Spanish banking system. Out of 13 merger processes that amalgamated 40 institutions, mostly *cajas*, 8 required FROB financial support. During 2009–12 FROB supported the financial system with two programs: (i) *FROB 1*: led to the integration of 25 *cajas* into 7 new banks, which received €9.7 billion in public aid under the form of preferred shares; and (ii) *FROB 2:* directed to enhance the recapitalization of 4 banking groups (including 3 out of the 7 newly merged institutions) through the subscription of €5.7 billion in common shares. Importantly, in 2012, under the ESM program, FROB borrowed about €41 billion from the government and launched FROB 3 to facilitate the transfer of failing institutions to proper buyers through direct recapitalization, guarantees on transferred assets (Asset Protection Scheme), and protection against contingent liabilities. It also supported the creation of Sareb in 2012 by investing €2.1 billion (45 percent of Sareb´s equity and subordinated debt).

[7] This may require an update of Circular 5-2011 of BdE.

Table 3. FROB Programs Between 2009–2012 and Sareb's Asset Purchases

		In € billion				
		FROB 1	FROB 2	FROB 3	SAREB (net)	Total
Banks transferred to private investo	**Merged institutions**					
CatalunyaBank→ BBVA	Catalunya, Tarragona, Manresa	1.3	1.7	9.1	6.7	18.8
Nova CaixaGalicia→ Banesco group	Galicia, Caixanova	1.2	2.5	5.4	5.1	14.1
Banco de Valencia→ Caixa	Single entity	-	1.0	4.5	2.0	7.5
Liberbank→ Merger of Cajastur, Caja de Extremadura and Caja Cantabria	Single entity	-	-	0.1	2.9	3.0
CEISS→ Unicaja	Caja España-Duero	0.5	-	0.6	3.1	4.3
Grupo Cajatres → Ibercaja	Navarra, Cajasol-Guadalajara, General de Canarias, Municipal de	-	-	0.4	2.2	2.6
Banca Cívica→ Caixa	Burgos	1.0	-	-	-	1.0
Unnim→ BBVA	Manlleu, Sabadell, Terrassa	0.4	0.6	-	-	0.9
Banco Gallego→ Sabadell	Single entity	-	-	-	0.7	0.7
		4.3	**5.7**	**20.1**	**22.7**	**52.9**
Banks under FROB's owneship						
BFA-Bankia	Madrid, Bancaja, Laietana, Insular, Rioja, Ávila, Segovia	4.5	-	18.0	22.3	44.7
Banco Mare Nostrum	Murcia, Penedés, Sa Nostra, Granada	0.9	-	0.7	5.8	7.5
		5.4	**-**	**18.7**	**28.1**	**52.2**
		9.7	**5.7**	**38.8**	**50.9**	**105.1**

Source: FROB, Sareb and staff calculations

17. These bank restructuring efforts have exposed FROB to losses (so far about €44 billion on a cumulative basis) and have recently required its recapitalization (Table 4). In June -2017, the state converted about €3 billion of its loans to FROB into equity (in 2012 FROB's recapitalization was achieved through debt conversion for €27 billion). The main source of FROB´s losses are associated with the impairment of funds invested in restructuring NCG (now Abanca), Bankia, Catalunya, and Valencia, which amounted to about €38 billion.

18. Going forward, FROB's losses should be limited, although there are risks associated with the divestment process of Bankia and potential claims from the acquirers of the resolved banks. The recent merge of Bankia and BMN has created a bank of about €230 billion in assets—the aim is to improve recovery value for FROB and private investors (which hold around 35 percent of total shares). Importantly, as of December 2016, uncertainty remains as regards legal contingencies faced by FROB on guarantees granted to the acquiring institutions of the resolved banks, including against the ruling by the European Court on the floor clauses of bank mortgages, as these potential losses must be absorbed by FROB.

Recommendations

19. FROB has played a significant role in the restructuring and resolution of the Spanish banking system; the next challenge is ensuring that Bankia, after completing its merger with BMN, is privatized by end-2019. Experiences in other countries have shown that similar processes take no less than 18–24 months. In this regard, the early participation of an investment bank or international consulting firm as an advisor to facilitate the process of privatization will help FROB successful exit its Bankia stake.

Table 4. FROB-Latest and Initial B/S & Equity Activities Between 2009-16 (in €billion)

	2016	2009		2016	2009
Cash & liquid assets	1.0	12.0	Bonds w/state guarantee	0.5	3.0
Investments	10.6	-	Owe to Treasury, due 2022-27	13.4	-
BAF-Bankia	9.2	-	Asset Protection & guarantees, provision	1.4	-
BMN	0.5	-	Repo and others	0.6	-
Sareb	0.8	-	**Equity Fund, net**	**(1.6)**	**9.0**
			Memo items. Equity activities between 2009-16 are largely comprised by:		
Other investments	2.7	-	***Capital injections***	**42.0**	**9.0**
CoCos in Ceiss	0.6	-	*State, cash*	12.7	6.7
Sareb,sub debt	0.7	-	*Deposit guarantee Fund (DGF), cash 1/*	2.3	2.3
Other	0.7	-	*Public debt conversion*	27.0	-
Public debt	0.7	-	***Losses (main sources)***	**(43.5)**	-
			Assets Impairment	(41.1)	-
			Asset protection programs	(1.3)	-
			Operational	(1.2)	-
Total assets	**14.3**	**12.0**	**Total liabilities and equity**	**14.3**	**12.0**

1/ As of today, DGF capital investment in FROB has been completely wiped out due to losses cummulated through 2012 .

PROGRESS BY SAREB IN ASSET RECOVERY AND CHALLENGES GOING FORWARD

20. Sareb was created in 2012 to deal with the management of certain nonperforming assets in bank portfolios of about €106.5 billion (€50.8 1billion, after discount). These included foreclosed assets exceeding €100,000, and loans to real estate developers exceeding €250,000. As mentioned earlier, 55 percent of Sareb's capital belongs to Spanish banks (including a foreign bank, Deutsche) and insurers, while the rest is owned by the Spanish government through FROB. To reinforce Sareb's buffers the private shareholders and FROB purchased Sareb's subordinated debt in similar proportion to their capital ownership. The state has also guaranteed Sareb's senior bonds issued to pay for the assets acquired from banks.

21. During 2012–16, Sareb deleveraged and repaid senior debt by about 22 percent and 20 percent, respectively. An effective asset management approach (including transformation of loans into REOs, loan collection, sales, and completion and disposal of unfinished properties) has allowed Sareb to generate revenues of about €17 billion during 2013–16, of which €9.9 billion were applied

Table 5. SAREB: Initial Balance Sheet
(In billions of euros)

Cash	4.8	Senior bonds	50.7
Loans	39.4	Sub. Debt	3.6
Real Estate Owned	11.3	Equity, of which:	1.2
		FROB	0.5
		Private	0.7
Total Assets	55.5	Total liabilities	55.5

Sources: Company reports and IMF staff estimates.

to repay senior debt and the remaining to largely cover operating and interest expenses on senior debt. Most of Sareb's sale operations to date were in retail assets and managed by four servicers, although in 2016 annual asset sales to institutional investors increased by 67 percent.

22. At present, Sareb's solvency has benefitted from special accounting treatment. Sareb's end-2016 audited financial statements show accounting insolvency of €2.7 billion, although for statutory purposes it reports equity resources of about €4 billion (capital plus subordinated debt), as unrealized losses for about €5.3 billion related to swap adjustments and impairment of assets do not count for corporate insolvency per the Spanish accounting rules and a Royal Decree, respectively.

Table 6. SAREB—Equity and Subordinated Debt

Sareb: Equity and subordinated debt (EUR bn)		
	2016	**2013**
Own resources	0.3	1.2
Retained earnings & reserves /1	2.3	
Equity before unrealized losses	2.6	1.2
Unrealized losses (RD 04/2016)	(3.3)	-
Unrealized losses (Mark to market of interest hedge) 2/	(2.0)	-
Equity, after unrealized losses	**(2.7)**	**1.2**
Convertible subordinated debt	1.4	3.6
Equity, after asuming debt cnversion	**(1.3)**	**4.8**

Source: Sareb's 2013-2016 audited financial statements
/1 Sareb is by Royal Decree exempted from facing liquidation in case of insolvency.
/2 Spanish GAAP exempts every company from facing liquidation in case of insolvency due to this figure.

23. By end-2027, according to Sareb's baseline cash-flow projections, its shareholders and subordinated debt holders would have access to €3.2 billion in cash, after payment of senior bonds in full. After factoring in the repayment of interest on subordinated debt of about €0.6 billion, FROB and private investors would recover about 79 percent of their nominal investment. Two key assumptions underline these projections, made on the basis of models developed by external providers:

- Evolution of real estate prices. Between 2017–28, residential and commercial real estate prices are expected to increase by about 60 percent, and land prices by 95 percent compared to 2016 prices. This expected positive price trend would allow Sareb to reverse in its equity account unrealized losses of €3.3 billion through end 2021 (see paragraph 30).

- Gradual increase of retail housing market share through 2022 with support of its four services provider companies—Sareb's sales are forecasted under the hypothesis that Spain's estimated traded volume in euros of residential properties would almost double between 2017–27, while the land property market would pick up significantly during 2020–25. Additionally, to enhance its market expansion Sareb has created a NPL selling platform aimed at institutional investors.

Table 7. SAREB Assets

Sareb: Asset structure by end-2016 (€ bn)	
Type of assets	**VNC**
Loans	28.1
REOs	11.9
Residential	5.1
Land	4.1
Tertiary & other	2.7
Total assets	**40.0**
Loans (units)	79,420
REOs (units)	115,736
Total inventory	**195,156**
Cash Flow 2017-2027 (€ billion)	
Initial cash	3.4
Inflows:	**55.2**
Operating income	52.5
Swap collateral release	2.7
Outflows:	**55.4**
Operating expenses	9.2
Senior debt interest	4.0
Repayment of senior debt	41.7
Subordinated debt interest	0.5
Funds available for repayment of initial investment	**3.2**

Source: Sareb

24. So far Sareb has met quite well its objectives and its revised business strategy appears to be well-designed, but its cashflow faces implementation risks through 2027 and more immediately over the next four to five years, including:

- **High sensitivity of Sareb's cash flow projections to asset price and loan recovery assumptions.** Although the curve of real estate properties has been prepared by independent experts, the expected price evolution could be in the high range (specifically, while according to the national statistics office, the national housing prices index grew 2.2 percent between 2012–2016 and 4.5 percent only between 2015–2016), Sareb's cash flows projections assume almost a similar behavior between 2017-27 (except for 2024 the forecasted housing price are expected to be above 4 percent, while some banks are reportedly using an annual index of 3 percent for the next three years). These cashflows are quite sensitive to plausible downside scenarios, for instance, if for any reason Sareb's total revenues were to be five percent lower than projected (sensitivity analysis), it would (due to the original cash protocol embedded in the bond contracts) come close to being unable to meet its expected senior debt amortization, which could potentially increase the financial costs and the carrying cost of the assets. This in turn, could affect cashflow estimates for the following five years (Figure 3).

- **High operating and financial expenses**. Until the end of its life, Sareb would spend €9.1 billion on operating and financial costs, or 22 percent of current total assets. Importantly, interest rate risk on Sareb securities is currently mitigated by a swap contract that puts a cap on its financial expenses through end-February 2023. Additionally, financial costs could end up being higher if the repayment of Sareb's senior debt were to depart materially from current cashflow projections due to deviations from the pace for asset disposal and price recovery.

- **Tough competition.** Although Sareb is the largest holder of legacy assets in Spain, it faces strong competition from banks. Moreover, while Sareb plans to dispose its assets within 11 years to maximize value and benefit from potential asset price recovery, Spanish banks, following ECB guidelines on NPLs, are likely to attempt to dispose their legacy assets within the next three to five years (through retail and wholesale activities). Banks' efforts to clean up their balance sheets at faster pace than Sareb may affect its expected price recovery (Sareb expects to obtain capital gains above book value of about €12 billion by end-2027).

- **Slow pace to transform loans into REOs and land into new developments.** While Sareb is clearly working on several fronts to enhance the value of its assets to achieve higher returns, including through completing unfinished buildings and developing land, these efforts could be constrained by factors out of Sareb's control, including unwillingness of borrowers to restructure their loans and allow collateral repossession, and lack of readiness in communities to change land use from rural to urban. The latter is particularly relevant for Sareb considering that land accounts for almost one third of its assets.

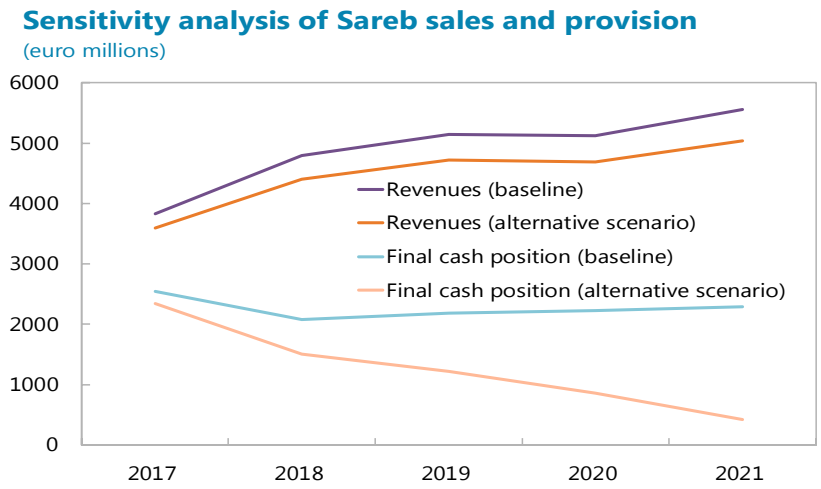
- **Risks associated with the location of Sareb's real estate assets**. While in weighted average terms, between 2013–16, the price of Sareb's properties located in the eight premium provinces (37 percent of total stock, including Madrid, Barcelona, and Alicante) rose by 2.4 percent, it declined by 15 percent in the other 43 provinces (63 percent of total stock, including Valencia, Murcia, and Castellon). Thus, in the same weighted average terms and period the price of Sareb's total stock of REOs and collaterals declined by 8.8 percent.[8]

- **Market pressures.** Despite the new accounting rules on impairment recognition and legislation that protects it from technical insolvency, Sareb could face market pressure down the road to prove its viability. If operational losses were to continue, and banks were unwilling to inject capital into Sareb, sovereign risks might increase. This would reflect the possibility that public funds may need to be used to quickly replenish Sareb's own resources to avoid market uncertainty, especially if there is risk that Sareb may be counted as state owned by Eurostat.

- **Evolving customer preferences**. Spanish households have traditionally a high propensity to buy a home rather than rent, but preferences could change. Signs of this are growing in the property market—in 2016 the number of properties leased by Sareb rose to almost 4,600 units.

[8] Only 22 and 18 percent of Sareb's loans and REOs, respectively, are in jurisdictions that saw price increases since 2012 (those with more than 250 thousand inhabitants).

Figure 3. SAREB Cashflow Sensitivity Analysis



Sources: Sareb and IMF staff calculations

25. Thus, Sareb's success should be largely assessed by its key role in limiting the impact of the 2012 crisis and progress made so far in asset disposal and a reduction of its senior debt, however, its performance remains critical in contributing to financial stability going forward. As discussed above, Sareb's main objective and long term challenge is to dispose its remaining €40 billion of assets in order to generate €52.5 billion through cash sales to repay its remaining €41.7 billion of senior bonds held by banks to avoid the need to activate the government guarantee. While not a bank itself, Sareb's total or partial failure to achieve its goals could add up to the existing public debt.

Recommendations

26. The authorities should assess the downside risks to Sareb's projections. Specifically, in addition to the monthly review of Sareb's performance by its management board, two supporting work streams could prove critical regarding projections for the next four to five years:

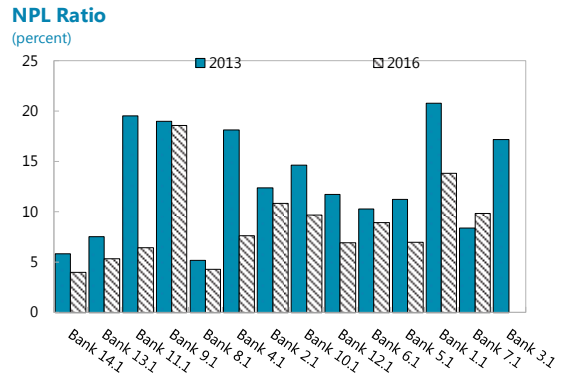
- **BdE's bi-annual assessment of Sareb's cash flow projections.** The BdE should challenge Sareb's cashflows projections based on its internal macroeconomic projections (including real estate prices, credit growth, and unemployment), as well as adverse scenarios. On that basis, Sareb should prepare alternative cashflow plans for the same period.

- **If according to BdE' adverse scenario the risk is high that Sareb's liquidity may substantially fall below its current projections the need to adopt mid-term corrective measures should be considered.** To this end, a tripartite group (MdE, FROB, and SAREB)—comprised by members independent of its Monitoring Commission—could be appointed to objectively analyze and identify any needed mid-term correction in Sareb's business plans.

Appendix I. Banks' Progress

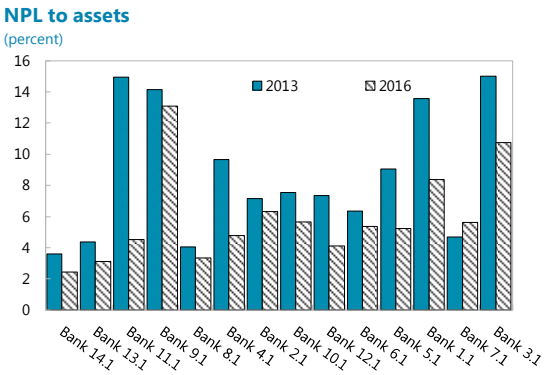
Appendix Figure 1. Banks Progress with Legacy Assets

NPL ratios have been reduced….



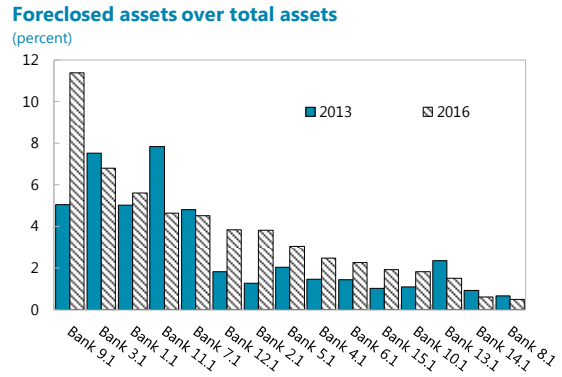
Sources: SNL and bank reports

Along with NPL to total assets



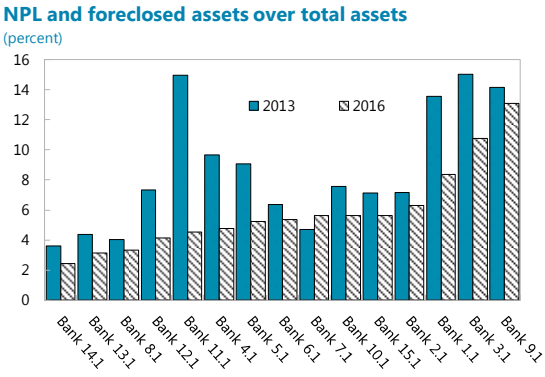
Sources: SNL and bank reports

Progress made in turning NPLs to foreclosed assets….



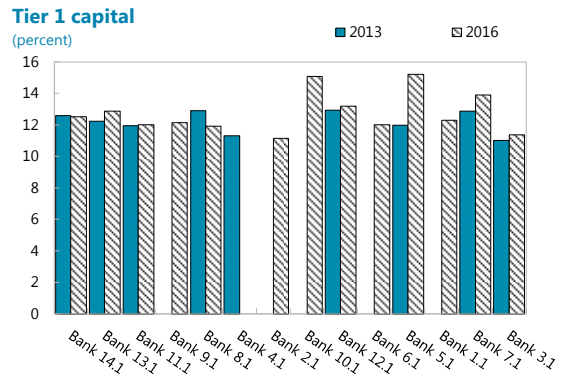
Sources: SNL and banks reports

Progress in reducing total NPLs and foreclosed assets….



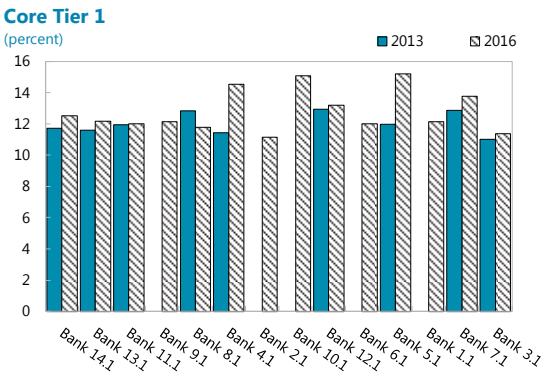
Sources: SNL and banks reports

Tier 1 capital has been rebuilt for many banks…



Sources: SNL and bank reports

Core Tier 1 capital has been rebuilt for most banks….

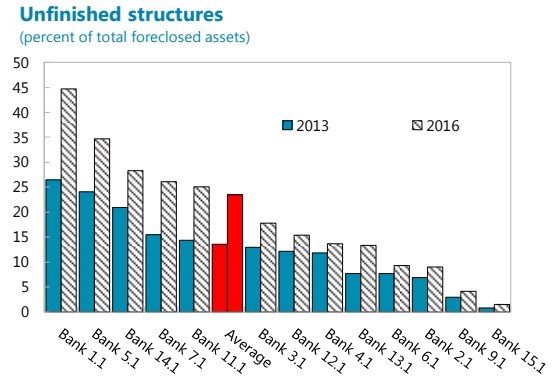


Sources: SNL and bank reports

Sources: SNL, banks reports; and IMF staff estimates.

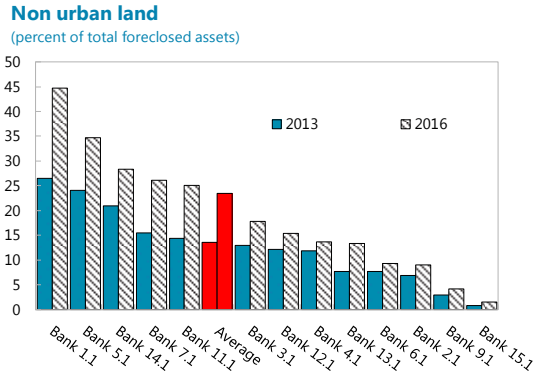
Appendix Figure 2. Some Banks Show Higher Difficulty to Sell Assets and Rely More Heavily on Collateral

Unfinished structures are harder to sell and remain on banks' balance sheets….



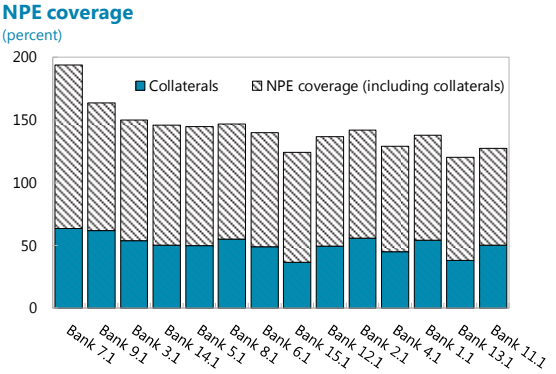
Sources: : SNL and banks reports

Non-urban is difficult to see and continue to be a drag on banks' balance sheets….



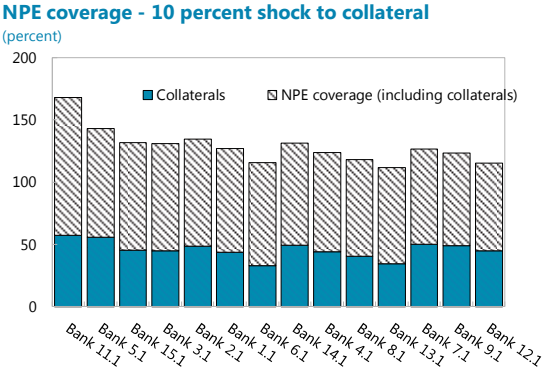
Sources: : SNL and banks reports

Some banks rely more heavily on collateral to mitigate legacy assets losses….



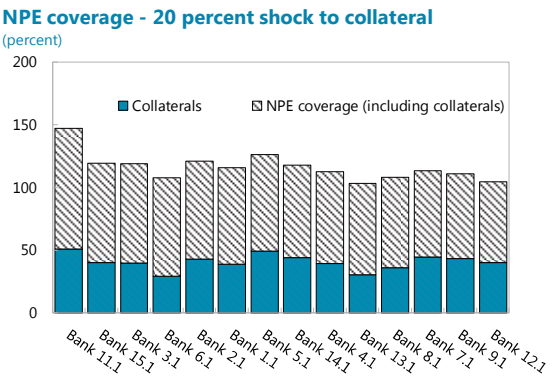
Sources: EBA Transparency Exercise (2016)

Thus, even a moderate shock to collateral values reduces some banks coverage significantly….



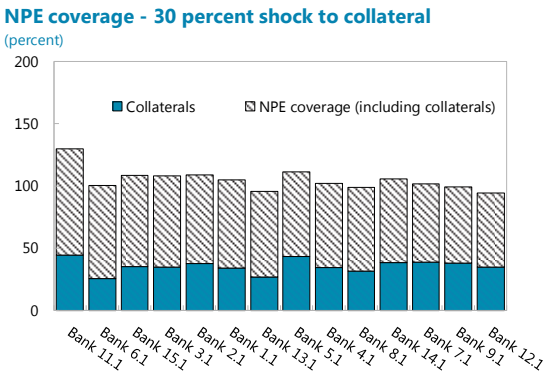
Sources: EBA Transparency Exercise (2016)

While a modest shock to collateral values severely affects some banks coverage….



Sources: EBA Transparency Exercise (2016)

A strong shock to collateral values pushes some banks coverage below 100 percent….



Sources: EBA Transparency Exercise (2016)

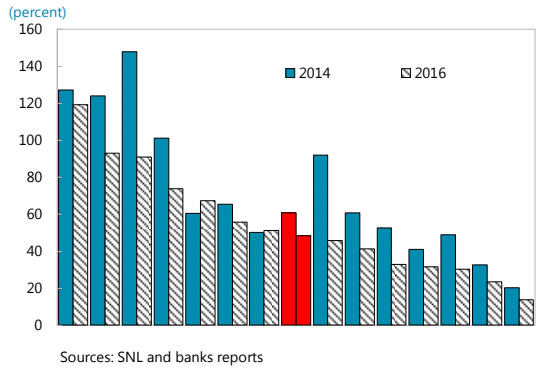
Sources: SNL, EBA, banks reports; and IMF staff estimates.

Appendix Figure 3. Evolution of Individual SIs Since the Crisis

(Red bar is the median bank ratio of SI14s)[1]

Coverage ratios are relatively low for some banks…

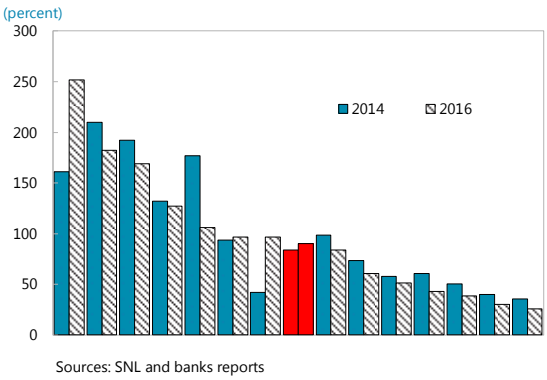
NPL-Provisions to Tier 1



Sources: SNL and banks reports

including when they include foreclosed assets in addition to NPLs

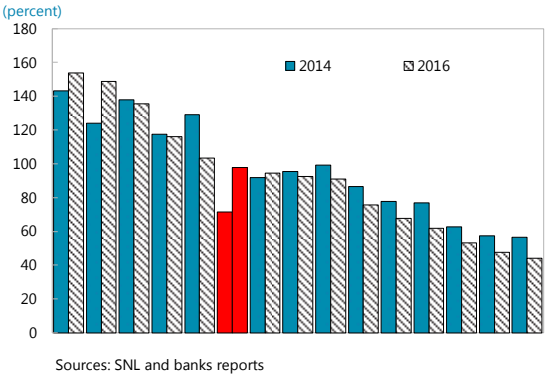
NPL+Foreclosed Assets-Total Provisons over Tier 1



Sources: SNL and banks reports

Foreclosed assets are high when measured by the Texas[2] ratio

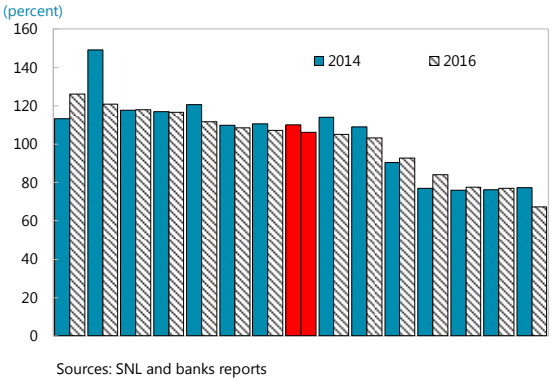
Texas ratio



Sources: SNL and banks reports

While their loan to deposit ratios have not improved since the crisis

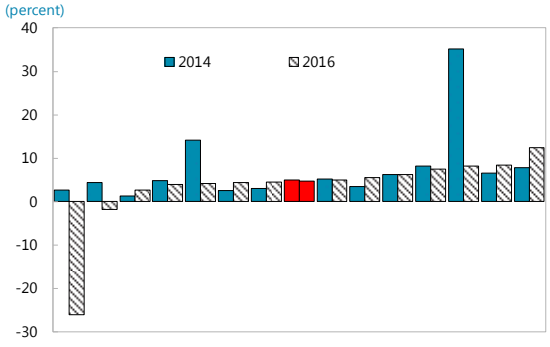
Loan to deposit ratio



Sources: SNL and banks reports

and have also very low profitability

Return On Average Equity (ROAE)



Sources: SNL and banks reports

Sources: SNL, banks reports; and IMF staff estimates.

[1] The median denotes a value lying at the midpoint of the frequency distribution of observed ratios, such that there is an equal probability of falling above or below it.

[2] The Texas ratio = (Impaired Customer Loans, Gross of Reserves + Foreclosed Assets) / (Reserves for Impaired Customer Loans + Tier 1 Capital + Provisions)