FINANCIAL STABILITY REPORT

11/2016

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Eurosistema

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ABBREVIATIONS [*]

€	Euro
AIAF	Asociación de Intermediarios de Activos Financieros (Association of Securities Dealers)
ABCP	Asset-backed commercial paper
ATA	Average total assets
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BLS	Bank Lending Survey
bn	Billions
bp	Basis points
BRRD	Bank Recovery and Resolution Directive
CBE	Banco de España Circular
CBSO	Banco de España Central Balance Sheet Data Office
CCB	Countercyclical capital buffer
CCR	Banco de España Central Credit Register
CDO	Collateralised debt obligation
CDS	Credit Default Swap
CEBS	Committee of European Banking Supervisors
CEIOPS	Committee of European Insurance and Occupational Pensions Supervisors
CET1	Common equity Tier 1 capital
CIs	Credit institutions
CNMV	Comisión Nacional del Mercado de Valores (National Securities Market Commission)
CPSS	Basel Committee on Payment and Settlement Systems
DIs	Deposit institutions
EAD	Exposure at default
EBA	European Banking Authority
ECB	European Central Bank
EFSF	European Financial Stability Facility
EMU	Economic and Monetary Union
EONIA	Euro overnight index average
EPA	Official Spanish Labour Force Survey
ESFS	European System of Financial Supervisors
ESM	European Stability Mechanism
ESRB	European Systemic Risk Board
EU	European Union
FASB	Financial Accounting Standards Board
FLESB	Forward-Looking Exercise on Spanish Banks
FROB	Fund for the Orderly Restructuring of the Banking Sector
FSA	Financial Services Authority
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FSF	Financial Stability Forum
FSR	Financial Stability Report
FVC	Financial vehicle corporation
GAAP	Generally Accepted Accounting Principles
GDI	Gross disposable income
GDP	Gross domestic product
G-SIIs	Global systemically important institutions
GVA	Gross value added
GVAmp	Gross value added at market prices
IASB	International Accounting Standards Board
ICO	Instituto Oficial de Crédito (Official Credit Institute)
ID	Data obtained from individual financial statements
IFRSs	International Financial Reporting Standards
IMF	International Monetary Fund
INE	National Statistics Institute
IOSCO	International Organization of Securities Commissions
ISDA	International Swaps and Derivatives Association
JST	Joint Supervisory Team
LGD	Loss given default
LTROs	Longer-term refinancing operations
LTV	Loan-to-value ratio (amount lent divided by the appraised value of the real estate used as collateral)

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

m	Millions
MiFID	Markets in Financial Instruments Directive
MMFs	Money market funds
NPISHs	Non-profit institutions serving households
NPLs	Non-performing loans
OFIs	Other financial intermediaries
OMT	Outright Monetary Transactions
OTC	Over the counter
PD	Probability of default
PER	Price earnings ratio
pp	Percentage points
RDL	Royal Decree-Law
ROA	Return on assets
ROE	Return on equity
RWA	Risk-weighted assets
SCIs	Specialised credit institutions
SMEs	Small and medium-sized enterprises
SIV	Structured investment vehicle
SPV	Special purpose vehicle
SRI	Systemic Risk Indicator
SSM	Single Supervisory Mechanism
TA	Total assets
TARP	Troubled Asset Relief Program
TLTROs	Targeted Longer-term Refinancing Operations
VaR	Value at risk
WTO	World Trade Organisation

ISO COUNTRY CODES

AT	Austria
BE	Belgium
BG	Bulgaria
BR	Brazil
CH	Switzerland
CL	Chile
CN	China
CY	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
ES	Spain
FI	Finland
FR	France
GB	United Kingdom
GR	Greece
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
JP	Japan
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
MX	Mexico
NL	Netherlands
NO	Norway
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
TR	Turkey
US	United States

CONTENTS

1 Key developments

In recent months, despite the uncertainty generated by certain geopolitical events, domestic and international financial markets have – with additional support from monetary policies – been relatively stable. This stability has been manifest in low levels of volatility, across-the-board reductions in risk premia, declines in government and private debt yields, and rises in stock market indices. The valuation of debt and equity issued by the banking sector, in particular in Europe, has remained highly sensitive. That mirrors the markets' concern about the prospects for the sector's profitability against a background of weak economic growth, squeezed net interest margins, a still-high level of NPLs in certain banking systems and greater regulatory requirements.

Global economic activity has continued to post very moderate growth as a result of the slowdown in the advanced countries and the stabilisation of the emerging economies. In recent months, moreover, the international economic outlook has continued to be revised downwards. The Spanish economy has shown greater strength than expected during the first half of this year, posting quarter-on-quarter growth rates of 0.8% in the first two quarters. INE's flash estimate of GDP in Q3 shows notable growth (0.7%), albeit somewhat down on that of the previous quarters. In the medium term a gradual slowdown is forecast, underpinned by the tailing off of certain recent expansionary impulses, such as the fall in oil prices, the considerable looseness of financing conditions, the depreciation of the euro and the expansionary fiscal policy stance.

Spanish deposit institutions have maintained the modest growth shown in the latest Financial Stability Reports (FSR). Specifically, their consolidated assets grew by 0.4% year-on-year in June 2016, owing essentially to their international activity, which offsets the effects of the reduction in loans to households and firms in their banking business in Spain. Against this background of low activity and low interest rates, consolidated income during the first half of this year fell by 23.6%, entailing a return on equity of around 6%. Lower asset impairment losses (–21.4% in provisions) have, to some extent, enabled the reduction in margins to be offset. In terms of business in Spain the situation is similar, with a narrowing in the interest margin of 9.4% compared with that in the first half of last year. In any event, the improvement in economic activity in Spain has enabled the volume of deposit institutions' NPLs and forborne exposures to continue declining. In particular, NPLs have fallen by 38% since December 2013.

Spanish institutions' solvency continues to comfortably exceed the regulatory minimum levels. As at June 2016, the common equity tier 1 (CET1) capital ratio stood at 12.4%. In addition, a forward-looking assessment of the Spanish banking system's resilience described in this Report shows that, at the aggregate level, in the face of an adverse macroeconomic scenario, the Spanish banking system would, at the end of the time horizon set, see a significant reduction in its capital levels; but even so, it would manage to maintain solvency above the minimum regulatory level required. This conclusion matches that arising from the stress test conducted by the European Banking Authority (EBA) for a sample of representative European banks (six of them Spanish).

2 Risk factors

Identified below are the main risk factors for the stability of the Spanish financial system.

RISK FACTORS (a) TABLE 1

1	Low profitability of domestic banking business in an environment of very low interest rates, a still-declining volume of banking activity and a still-high – though continuously diminishing – level of non-productive assets.
2	Deterioration in the growth outlook for the domestic and international economies, affecting those in which Spanish banks are significantly exposed.
3	Downward correction in the prices of financial assets, both fixed-income and variable-yield securities, as a result of a rise in risk premia.

SOURCE: Banco de España.

a Colour ranking in the table is as follows: green denotes no risk, yellow is low risk, orange is medium risk and red is high risk. The time horizon for which these risks are defined is determined by the FSR frequency, i.e. it is biannual.

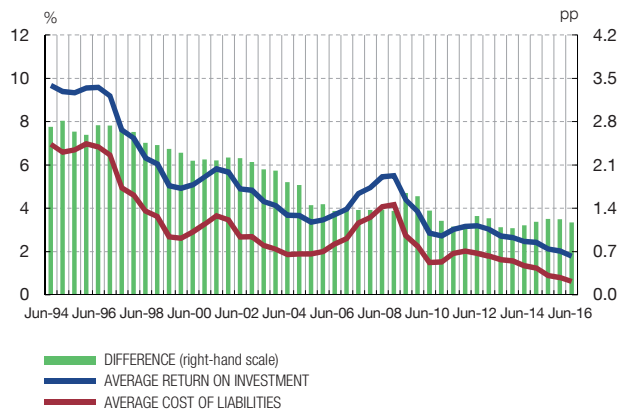
These three risk factors coincide with those highlighted in the previous FSR and, as discussed, these factors are interrelated, meaning that, should any of them materialise, the consequences might be the reactivation of either of the other two. These risk factors affect, to a greater or lesser extent, Spain's European partners; accordingly, the various European authorities signal them as the main risks affecting the European banking system as a whole. Domestically, certain factors of risk linked to the uncertainty over the future thrust of economies policies also persist.

2.1 LOW PROFITABILITY OF SPANISH BANKING BUSINESS

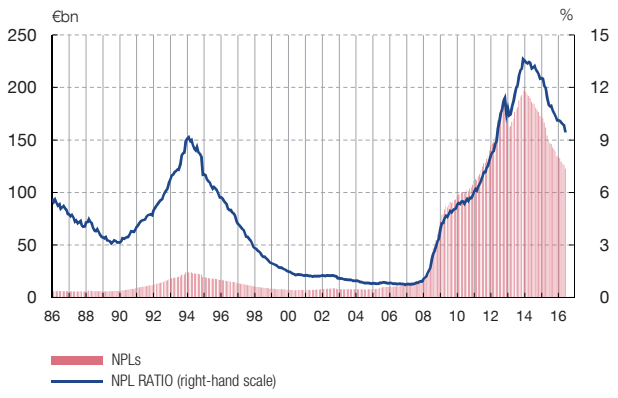
The current environment of very low interest rates, along with a still-very-limited volume of new banking business and a still-high level of non-productive assets, weighs down on the income-generating capacity of Spanish deposit institutions. Chart A shows that, in line with the decline in market interest rates, the return on assets and the cost of liabilities also fall, although the room for further decline in this latter variable tends to lessen as the interest rates on retail deposits, which are the bulk of liabilities, draw closer to zero. The upshot of this development, along with other factors, is that net interest income per unit of asset is close to all-time lows.

The high volume of non-productive assets on bank balance sheets exerts downward pressure on the income statement (Chart B). In any event, the notable and continuous reduction in the volume of assets classified as non-performing further to the improved macroeconomic conditions and the lesser interest burden associated with loans bearing lower interest rates, as a result of the monetary policy pursued by the European Central Bank (ECB), alleviates the pressure which, via margins, is exerted on Spanish institutions' income statement.

A DIFFERENCE BETWEEN AVERAGE RETURN ON INVESTMENT AND AVERAGE COST OF LIABILITIES
Business in Spain, ID



B RESIDENT PRIVATE SECTOR NPLs AND NPL RATIO
Business in Spain, ID



SOURCE: Banco de España.

Against this backdrop of depressed margins which, foreseeably, will be protracted, it is expected that institutions will persevere in their efforts to increase efficiency through cost-cutting and in turn explore alternative income sources. Also, in specific cases, they might consider possible corporate operations, which of themselves usually provide for gains in efficiency in the medium term.

2.2 DETERIORATION IN THE GROWTH OUTLOOK FOR THE INTERNATIONAL AND SPANISH ECONOMIES

Global economic activity has continued to post very modest growth, as a result of the widespread slowdown in the advanced economies and of the stabilisation of the pace of growth in the emerging economies. Moreover, the growth outlook has continued to be revised downwards (see Charts C and D). Behind this behaviour of global economic activity lie various structural and conjunctural factors. In the case of the Spanish economy, economic growth in recent quarters has held relatively high, although a gradual slowdown is forecast for 2017 and 2018.

In respect of this baseline scenario of economic growth at the domestic and international levels, the risks of a more unfavourable trend arising continue to outweigh those pointing in the opposite direction. Specifically, at the global level, there are risks linked both to a downturn in the macroeconomic outlook for certain more vulnerable emerging economies and to geopolitical tensions. In the euro area, the risks include most notably those linked to future negotiations on the United Kingdom's exit from the European Union (EU), to various upcoming elections and to migratory issues and security problems, and their potential effect on agents' confidence.

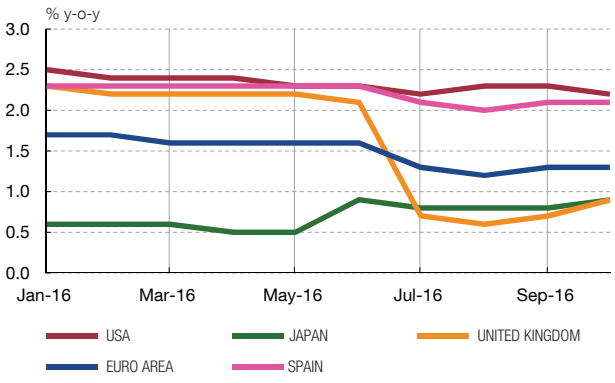
Along with the foregoing external factors, the Spanish economy is exposed to domestic risks. These include most notably uncertainty over the future course of economic policies and, in particular, over the ultimate budgetary measures needed to meet the budget deficit targets to 2018 agreed with the European Council in August and the structural reforms our economy requires to raise its potential growth.

The materialisation of any of the foregoing risks might have a negative impact on economic growth in Spain or in countries to which Spanish banks are exposed, which would exert an adverse effect on the quality of their assets.

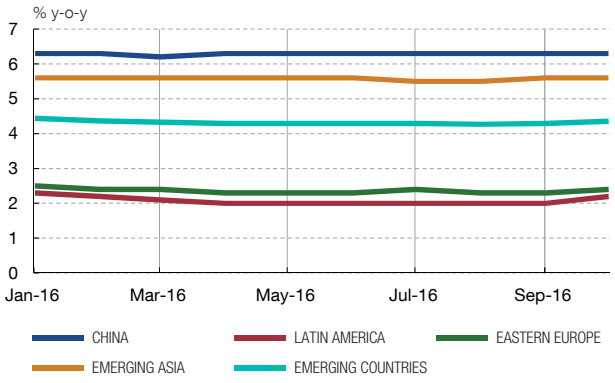
2.3 RISKS SURROUNDING FINANCIAL ASSET PRICES

The recent course of domestic and international financial markets has been one of relative stability, reflected in low volatility levels for both fixed-income and variable-yield instruments, in across-the-board reductions in risk premia and declines in government and private debt yields (see Charts E and F), and in a particularly marked recovery in the

C 2017 GROWTH FORECASTS FOR ADVANCED ECONOMIES



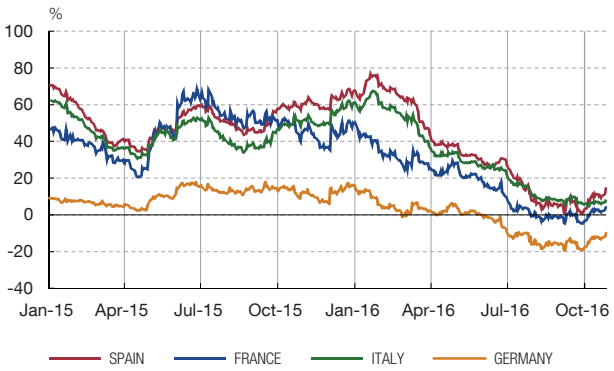
D 2017 GROWTH FORECASTS FOR EMERGING ECONOMIES



SOURCE: Consensus Forecasts.

E IMPLIED VOLATILITY

F ISSUANCE COST OF COVERED BONDS



SOURCE: Datastream.

financial markets of those emerging countries that had been considered as most vulnerable. Despite the current relative stability, the future course of asset prices is conditional upon the potential changes in agents' expectations or in their attitude to risk, especially in a setting in which the valuations of certain instruments have reached their highest levels of recent years. Thus, for instance, a possible materialisation of some of the risks to economic growth previously signalled might lead to a correction in prices. Such a correction would translate into asset impairment and into a worsening of financing conditions, affecting – to a greater or lesser degree – all economic sectors, including the financial sector, with the immediate effect of a downturn in their profit outlook.

As on previous occasions, the aforementioned risks are analysed in greater detail throughout this FSR in an attempt to show their possible impact on the financial system, in particular on the activities pursued by Spanish deposit institutions, and their potential repercussions on these institutions' solvency.

3 Analysis and macroprudential policy

Chapter 3, along the lines established in the previous FSR, is devoted to describing the macroprudential policy stance pursued by the Banco de España in recent months. Specifically, for 2016 Q4, the decision – based on the technical analysis of specific quantitative indicators, and on qualitative information and expert judgement – has been to hold at 0% the percentage of the countercyclical capital buffer applicable to credit exposures in Spain. In addition, the chapter includes a description of the arrangements for the reciprocity of macroprudential measures in the EU.

1.1 External environment of the euro area

The growth outlook for the global economy has continued to be revised downwards…

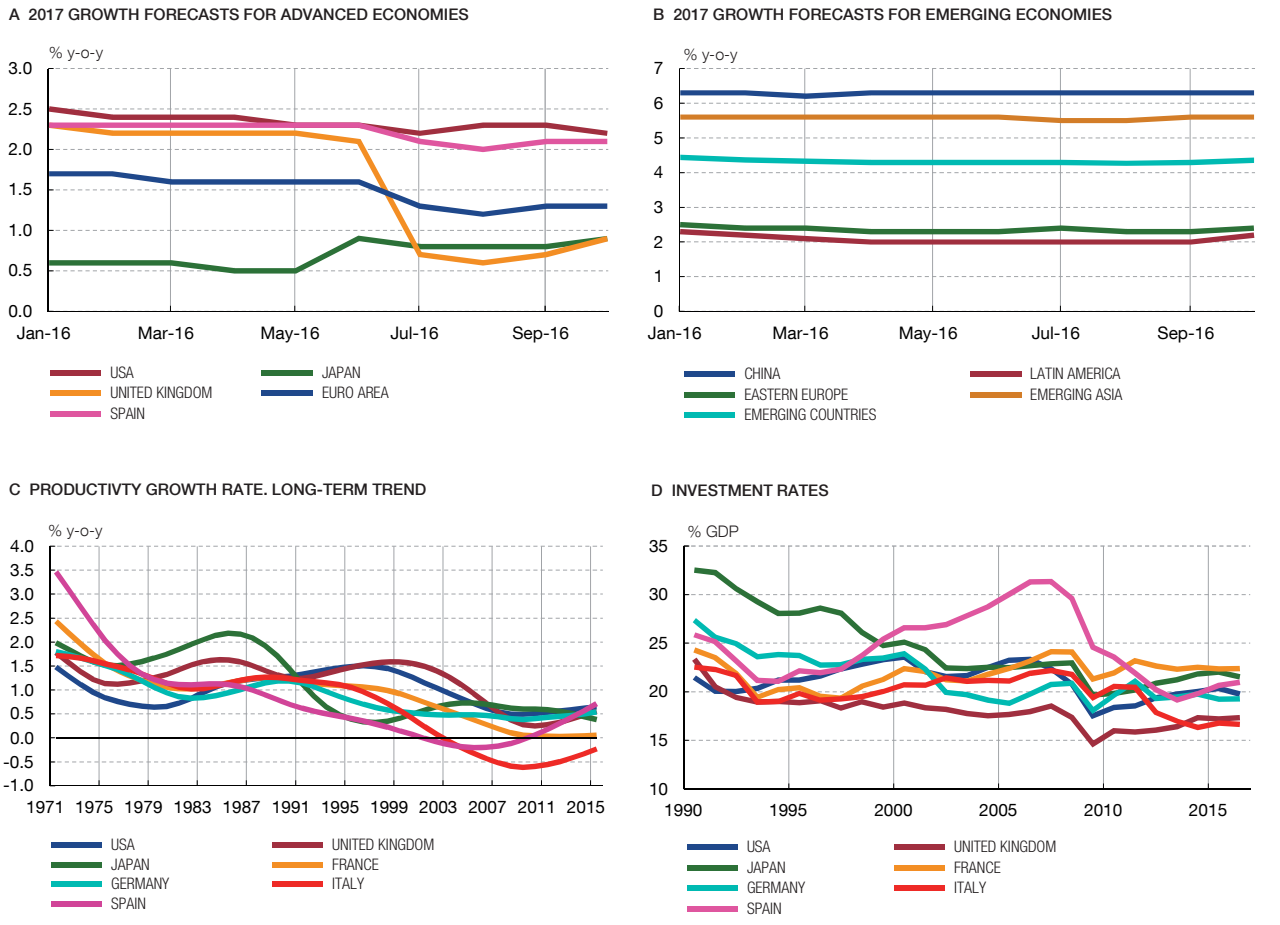
Since the publication of the last FSR, global economic activity has continued to show very modest growth, down indeed on that in 2015. This has been the outcome of the across-the-board slowdown in the advanced economies and the stabilisation – albeit as part of a mixed pattern – of the pace of growth in the emerging economies.

Furthermore, economic prospects have continued to be revised downwards (see Charts 1.1.A and B), in an economic setting characterised by low inflation rates and very low interest rates. Behind this markedly weak behaviour of global economic activity lie long-term supply-constraining factors, such as population ageing, long-term unemployment and the slowdown in productivity, which feed back into the persistent sluggishness of demand, and of investment in particular, in clear contrast to the improvement in financing conditions (see Charts 1.1.C and D). Compounding these factors, more recently, has been the notable weakness of global trade, which may also be reflecting a degree of stagnation in global integration and a certain rise in protectionist policies.

… while certain economic and geopolitical trouble spots have emerged

The unexpected UK referendum result on continuing EU membership prompted significant turbulence on financial markets and a degree of pessimism in agents' expectations. However, the markets picked up relatively swiftly, and the latest economic indicators

GDP GROWTH, PRODUCTIVITY AND INVESTMENT RATES IN ADVANCED ECONOMIES CHART 1.1



SOURCES: Consensus Forecasts, AMECO, OECD and WEO (April 2016).

appear to point to greater dynamism in the second half of the year. Even in the case of the United Kingdom, confidence indicators appear to have recouped some of their losses following the referendum and the short-term economic impact appears to be less acute than expected. That said, the effects of the uncertainty surrounding the ultimate exit from the EU and the new framework of relations to be set in the future have led to a downward revision of expected growth in the United Kingdom in the coming years, and more marginally so in the economies with the closest links to the UK economy (see Box 1.1).

THE IMPACT OF THE UNITED KINGDOM'S EXIT FROM THE EU ON FINANCIAL MARKETS AND THE GLOBAL ECONOMY — BOX 1.1

The result of the UK referendum on whether or not to remain in the EU has created a new economic and political scenario for that country which, given its trade and financial ties with the rest of the world, and especially with European countries, may ultimately have wider-ranging repercussions.

In the short and medium term, it was expected that the UK economy would witness a tightening of financial conditions (an increase in risk premia and in the cost of financing, and diminished availability of funds), an adverse effect on asset prices (especially in the residential and real estate sector) and a downturn in agents' confidence, which would depress domestic demand. The depreciation of sterling and the subsequent improvement in the competitiveness of UK-manufactured products would enable these effects to be offset in part, along with a further easing in monetary policy which, at a later stage, might also be supported by a more expansionary fiscal policy. Evidently, both lower domestic demand in the United Kingdom and its gains in competitiveness would mean that the domestic output of the countries with the most significant trade ties with the UK would undergo a downward adjustment.

Over a longer-dated horizon, the effects on UK productive capacity are more difficult to anticipate since they largely depend on the trade and financial arrangements that the UK may ultimately agree to not only with the EU but also with other major economic areas such as the United States or the Asian economies. In any event, an increase in tariff and non-tariff barriers cannot be ruled out, which would have an adverse bearing on British producers' sales abroad.[1] In addition, the provision of financial services from the United Kingdom might be affected, especially in the case of those activities that currently benefit from the European passport for their access to EU countries. Further, given the size and the trade ties of the UK economy with other countries, activity in the latter economies may also be expected to suffer; however, in some cases positive effects arising from a possible relocation of activities to outside the United Kingdom may arise.

Numerous papers have been written attempting to quantify the scale of all these effects. The impact, according to the studies, ranges between –1% and –6%[2] of the level of UK GDP in 2018, on the basis of the scenario and assumptions envisaged. The consequences for the global economy would be on a lesser scale (–0.1% to –0.3% of global GDP in 2018), although there are naturally significant country-to-country differences depending on the ties they have with the United Kingdom.

1 The fall in trade may already be discernible in the short term, insofar as this future loss of markets is anticipated and a re-ordering of global production processes is initiated.

2 See IMF (2016), «Macroeconomic implications of the United Kingdom leaving the European Union», UK Article IV Consultation, Selected Issues, June.

Chart A
STOCK EXCHANGE INDICES

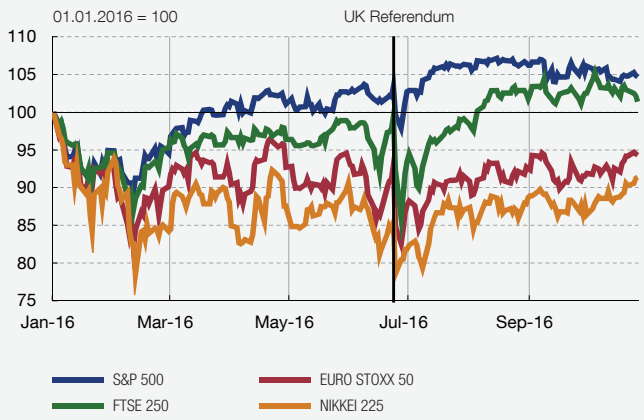
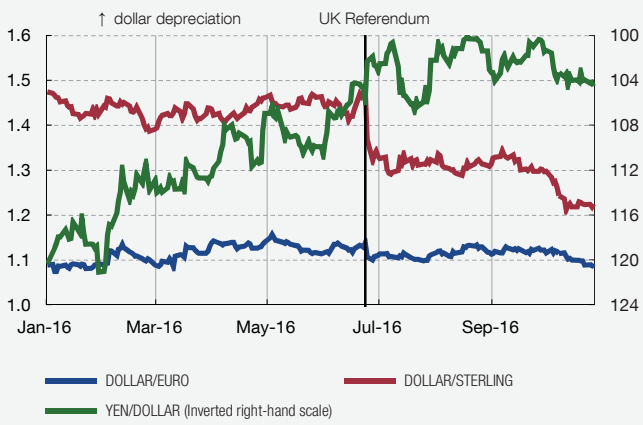


Chart B
SPOT EXCHANGE RATES



SOURCE: Datastream.

The initial reaction of the markets to the referendum result shows how unexpected it was and the numerous uncertainties it poses. Hence, in the two market sessions after the referendum there were across-the-board increases in risk aversion and a flight to quality in respect of assets, which specifically saw a fall in the yields on the main sovereign benchmarks, including UK debt, and generalised declines in stock market indices, in particular in the euro area and the United Kingdom (the EURO STOXX 50 index fell by 11.2% and the FTSE 250 by 13.7%). The reaction in the United States and Japan was more contained, as was the case with the FTSE 100 index, made up of companies with a greater weight of international activity and of sales in foreign markets. The stock market indices for the banking sector reacted very negatively, especially in the case of European banks (the EURO STOXX banks index posted a 23% fall). There was also a strong impact on UK banks, whose share prices underwent an average fall of 32.3%, although banks such as HSBC and Standard Chartered, which have a considerable volume of business outside the United Kingdom, were much less affected. In the case of the US banks, the effect on their share prices was much smaller.

Following this initial turmoil, market reaction was framed in a setting which saw a lessening of political uncertainty in the United Kingdom with the appointment of a new Government, which has entered into a lengthy process to see Brexit through, while the Bank of England implemented various stimulus measures. This situation was accompanied, as discussed in the main text, by expectations of more accommodative monetary policies over a longer period of time in most countries. That made for some recovery in the appetite for risk and the search for yield. Indeed, most stock market indices have already exceeded their pre-referendum levels, with the exception of UK and European bank share prices, which have not yet fully turned around. On the foreign exchange markets there was a partial correction of the depreciation sterling had undergone and a normalisation of market volatility, which had increased extraordinarily in the pre-referendum period and in the days immediately following it.

In any event, and despite the subsequent recovery in markets, doubts over how Brexit will unfold and the economic and financial effects arising from it remain latent. Accordingly, it cannot be ruled out that, as negotiations advance and the effects of this decision on variables such as investment and capital flows come to light, further episodes of volatility or corrections on financial markets may arise.

Adding to this is the uncertainty over the results of and ensuing policies that may arise from the US presidential election, doubts over the transition process in China's growth model, the potential effects on financial markets of the normalisation of US monetary policy, the persistence of very low inflation rates that may ultimately disanchor inflation expectations and, finally, various geopolitical risks. All these factors may impact, to a greater or lesser degree, international financial markets and global economic activity.

Against this background, the monetary policy stance remains highly accommodative,…

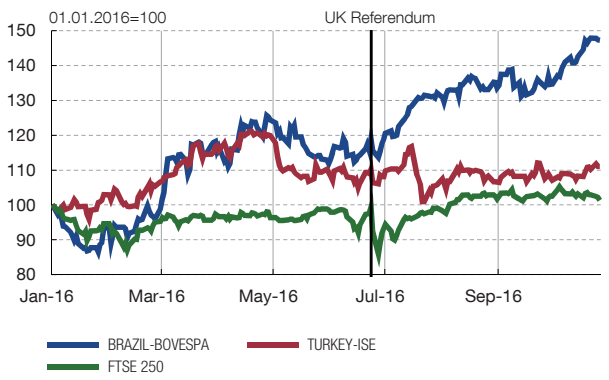
Weak growth, low inflation and the potential materialisation of certain adverse shocks suggest that the stance of monetary policies will continue to be highly accommodative, especially in the advanced economies, albeit with the significant exception of the United States, which is ahead in the cycle. Indeed, the United States is expected to continue with the process of rises in policy interest rates, albeit at a gradual and tempered pace. In the rest of the main advanced economies further expansionary measures have been – or are expected to be – adopted. For instance, the Bank of England introduced a forceful quantitative easing package at its August meeting in response to the referendum result, including a cut in its policy interest rate to 0.25%, a term funding scheme and an increase in asset purchases, including a new private bond purchase programme. Meantime, the Bank of Japan made significant changes to its monetary policy strategy following the assessment of its programmes. Specifically, the new strategy is based on two pillars: control of the yield curve slope and the commitment to inflation overshooting, which entails expanding the monetary base until inflation exceeds its target (2%) and holds above it in a stable fashion.

… prompting favourable performance on most financial markets,…

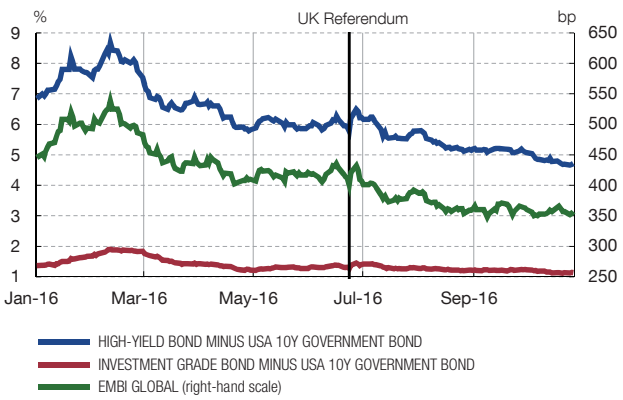
The accommodative monetary policy stance and the activism of central banks is one of the factors that may lie behind the swift recovery, or indeed the lack of a reaction by international financial markets to the emergence of various sources of uncertainty during this period (see Chart 1.2). This is in contrast to the first half of the year when the fall in oil

INTERNATIONAL FINANCIAL MARKET INDICATORS CHART 1.2

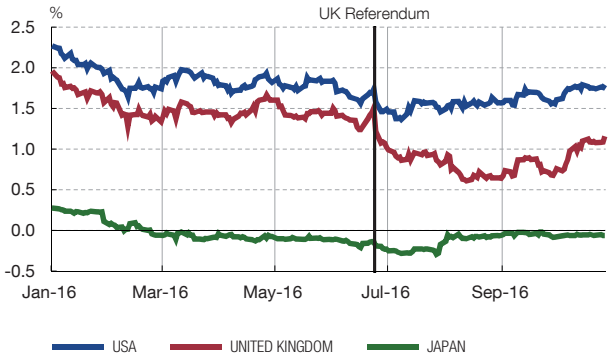
A STOCK EXCHANGE INDICES



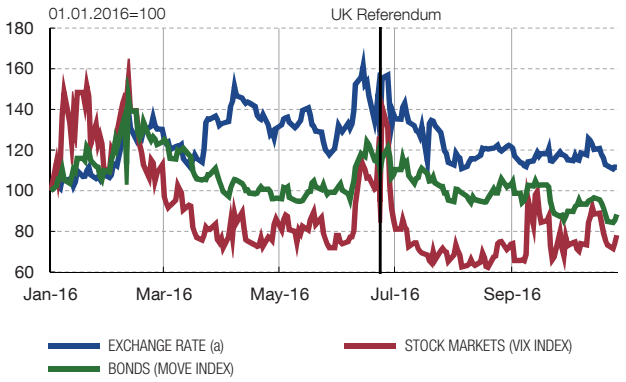
B CORPORATE SPREADS. USA AND EMBI GLOBAL



C SOVEREIGN DEBT 10Y YIELD



D IMPLICIT VOLATILITY INDICES



E USA: 10-YEAR BOND INTEREST RATE AND TERM PREMIUM

F USA: INFLATION EXPECTATIONS - Prob(Inf<2)

SOURCES: Datastream, Bloomberg, New York Federal Reserve and Banco de España.

a 3-month average volatilities for dollar/euro, dollar/sterling and yen/dollar.

prices and the financial tensions relating to China translated into greater sensitivity and rises in volatility in the face of negative news (see the May 2016 FSR), although these risks were also of a more systemic nature.

This relative stability and the reductions in risk premia on financial markets are fairly extensive to all financial assets and economic areas. Thus, stock market indices have risen across the board (indeed, the US S&P index posted all-time highs) and volatility, in variable-yield and fixed-income instruments and on foreign exchange markets alike, is at very low levels. There have also been across-the-board falls in US junk bond yields and in spreads

of emerging markets' debt, among other indicators. These developments have come about against the backdrop of weaker-than-expected growth and of downward revisions to business profitability prospects, which suggests that factors linked to lower discount rates and/or greater investor risk appetite must have played a greater role in recent developments.

Long-term government debt yields also fell across the board, particularly sharply so in the United Kingdom as a result of the effects of the referendum outcome and the measures implemented by the Bank of England. Behind these movements are not only a decline in long-term inflation expectations but also a fall in term premia.

… although banking sector stocks continue to perform less favourably

In the case of the banking sector, share prices have remained sensitive to market doubts over the outlook for the industry's profitability. And this in a setting in which bank margins are going to be pressured by the environment of low interest rates, the flattening of yield curves, the significant volume of non-productive assets, the weak economic growth outlook, greater regulatory requirements and heightening competition from other agents. The compression of long-term debt yields is particularly affecting institutional investors such as pension funds and insurers. Finally, the reform of US money market funds has prompted tensions in the Libor and in the cost of dollar funding for international banks. This reform, which came into force in October this year, is designed to minimise the risk of investor flight from these funds in crisis periods and to increase their transparency, and is confined to the prime money market funds.[1] Nonetheless, apart from these discrete movements, it would not appear likely that other money markets will be affected.

The search-for-yield maxim has also spread to emerging markets…

The emerging markets progressively stabilised following the turbulence early in the year, and recent months have been marked by a clearly positive performance, with significant stock market rises, an across-the-board appreciation in currencies and the compression of sovereign and corporate debt spreads, against the background of a return of capital flows towards the emerging economies.

The aforementioned global factors have been key determinants here, but so too have other, more specific factors such as the stabilisation of Chinese financial markets and the political developments in Brazil.

… set against some improvement in the economic outlook…

Quantitatively, the outlook for the emerging economies is not very different from the situation depicted in the previous FSR; qualitatively, however, there appears to be a change in sentiment which, should it persist, might ultimately translate into an improved growth outlook. In this respect, the emerging Asian economies saw, in the main, a bigger increase in GDP in Q2; in China growth stabilised, albeit underpinned by a strong increase in credit. In Latin America it appears that the cycle of monetary policy tightening has reached its end, and moderate growth was posted except in Argentina and Brazil, which are still in recession.

The higher-frequency indicators in Brazil suggest that activity might stabilise in the coming quarters. Indeed, 2017 might be the first year since 2014 in which Brazil grows. However, this forecast hinges crucially on fiscal credibility being regained. The executive has proposed a series of fundamental measures to ensure the sustainability of public finances, but these must be set in train without delay. Moreover, this would be accompanied by a gradual fiscal adjustment in the short term.

1 Prime money market funds are a type of US investment fund that invests mainly in financial and non-financial institutions' short-term debt securities. The reform measures affect these vehicles although certain measures, such as the freeze imposed on reimbursements or liquidity commissions during periods of turbulence, may be applied voluntarily by the funds that invest mainly in government-issued assets.

…although the challenges facing the economic authorities are most considerable

During this period, a new source of uncertainty arose in connection with the political situation in Turkey, following the failed coup on 15 July. While the Turkish financial markets appear to have stabilised following the initial impact, uncertainty has increased concerning the Turkish economy which, despite performing relatively favourably in recent years, continues to evidence a series of imbalances and vulnerabilities. These include most notably a high current account deficit, the financing of which is highly sensitive to changes in market sentiment.

1.2 Financial markets in the euro area and in Spain

European financial markets were initially much affected by the referendum result, subsequently showing a swift recovery and a reduction in risk premia

Initially, the European financial markets were, in comparative terms, greatly affected by the UK referendum result, although subsequently they recovered fairly quickly (see Box 1.1 and Chart 1.3). Some of the factors that help explain this improvement are the response by the Bank of England, a less-than-initially-expected macroeconomic impact and the market's expectation that interest rates would hold at low levels globally for a lengthy period.

Recent market developments have been characterised by an increase in stock market prices and a decline in fixed-income volatility and yields (see Chart 1.3). On the Spanish public debt market, 10-year bond yields stand at around 1.1%, meaning that the spread over the related German counterpart is at its lowest levels since spring 2015 (at around 100 bp). In private-sector securities a significant decline has been observed in issuance costs, which has been more marked in the case of those issued by non-financial corporations. This decline has been boosted by the Eurosystem's corporate securities purchase programme (CSPP), which was announced in March and launched in June.[2]

Despite the recovery, banking stock prices are at low levels and news-sensitive, which reflects the market's concern about the outlook for this sector

In the case of bank securities, whose valuations were initially greatly affected by the UK referendum result, the subsequent recovery has also been notable. That said, they are still at low levels, both when comparing their book value and in relation to mid-2015 records (from early July 2015 to end-October 2016 the EURO STOXX banks index posted a cumulative loss of 32%, see Chart 1.3.C). Investor concerns over the outlook for the sector are also manifest in the high sensitivity of valuations to sector-related news, as observed following the EBA's publication in late July 2016 of the stress test results.

Stock market prices do not appear to be misaligned in respect of historical PER, credit risk premia are close to their lowest levels of recent years, but above pre-crisis levels, and term premia appear to be exceptionally low

The habitual indicators suggest that, on average, listed share prices are not misaligned in respect of their past relationship to other magnitudes such as business profits. Hence cyclically adjusted price-earnings ratios (PER), both in the case of euro area stock markets as a whole and in that of Spain individually, are currently at lower levels than those of their historical averages (see Chart 1.3.E). The credit risk premia on public and private fixed-income securities stand, in general, at around their lowest levels in recent years, but above pre-crisis ones. Conversely, sovereign debt yield curve slopes are below their historical average, especially those of higher-rated assets (see Chart 1.3.F). This latter development is largely the outcome of the Eurosystem's asset purchase programme and of highly expansionary monetary policies globally.

The future course of financial assets prices is sensitive to changes in investor expectations or in their attitude to risk

Despite the current, relative stability of financial markets, the future course of asset prices is conditional upon the potential changes in agents' expectations or in their attitude to risk, especially in a setting in which the valuations of certain instruments have risen to their highest levels in recent years. Thus, for example, a potential materialisation of certain geopolitical risks, a downturn in the macroeconomic outlook or possible market doubts

2 See Box 4 of the "Quarterly report on the Spanish economy" in the Banco de España's September 2016 *Economic Bulletin*.

A STOCK EXCHANGE INDICES

B IMPLIED VOLATILITY

C BANKING SECTOR INDICES

D BANK CREDIT RISK PREMIA. 5Y CDS

E CYCLICALLY ADJUSTED PER (a)

F STEEPNESS OF THE YIELD CURVE (b)

SOURCES: Banco de España, Bloomberg and Datastream.

a The cyclically adjusted PER is calculated as the ratio of share price to 10-year moving average earnings. The dotted lines represent the historical averages of the series from 02.01.2005.
b Difference between the 10-year and the 3-month rate. The dotted lines represent the historical averages of the series from 01.01.2001.

over the capacity of economic policies to contribute to economic growth and to the recovery of inflation rates consistent with their medium-term references, might lead to a correction of share prices. That might translate into a tightening of financing conditions for the different sectors and into losses in investor financial portfolios.

1.3 The macroeconomic environment in the euro area and in Spain

The quarter-on-quarter growth of GDP in the euro area in Q2 was down on the related figure three months earlier (0.3%, against 0.5% in Q1); however, over the first six months a whole, the rate of increase was the same as in the second half of the previous year. The

A baseline scenario entailing a sustained but modest recovery for the euro area has been confirmed

latest projections published by the ECB (in September 2016) point to the continuity of this sustained but modest pattern of growth over the next two years, with rates of expansion of around 1.6% year-on-year (see Chart 1.4.A). In relation to projections six months earlier, the current forecast entails an upward revision of 0.3 pp in the growth estimated for the current year, but a downward revision of 0.1 pp and 0.2 pp, respectively, for 2017 and 2018. This downward revision in the coming years is chiefly in response to the impact on euro area external demand of the United Kingdom's situation following the referendum outcome last June.

With low inflation rates, that are expected to rise in the coming months, but which would hold in 2017 and 2018 still below the ECB reference level

Against this backdrop, prices in the euro area, measured by the Harmonised Index of Consumer Prices (HICP), rose slightly (to 0.4% year-on-year in September, the latest figure available). This trend is expected to continue in the final stretch of this year and early next year as a result of the base effect of the fall in oil prices in 2015 and early 2016. Core inflation, which excludes unprocessed food and energy, is holding at somewhat higher levels (0.8% over the May-September period), but is also clearly below the ECB's medium-term reference for price increases (a rate of inflation below but close to 2%). The latest ECB projections point to an average increase in prices of 1.3% in 2017 and 1.6% in 2018.

Risks of a more adverse trend of GDP than that reflected in the baseline scenario persist

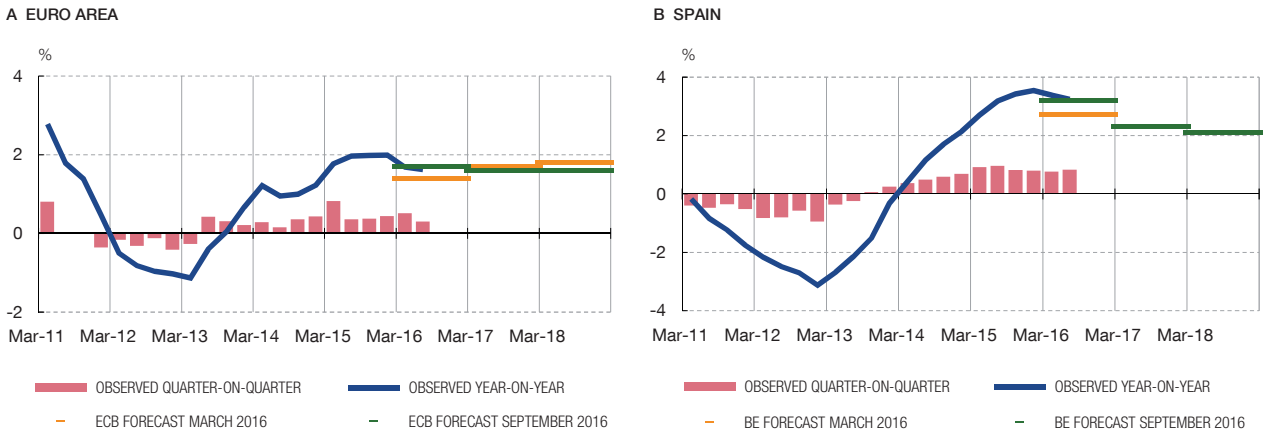
The risks of GDP trending more unfavourably than reflected in this baseline scenario continue to be greater than those tilting in the opposite direction. Firstly, the expected pick-up in the global economy continues to be uncertain. Further, both globally and within the euro area, there is significant geopolitical uncertainty that may give rise to adverse shocks to the area's economy. Most notable among those most directly affecting the euro area are the negotiations to be held for the United Kingdom's exit from the EU, the various upcoming elections in certain countries, migratory issues and the incidence of terrorism on agents' confidence.

Against this background, the Eurosystem kept its expansionary monetary policy unchanged

The ECB, following its expansionary measures last December and March, has kept its monetary policy unchanged. It has, however, reiterated its expectations that policy interest rates will hold at their current or at lower levels for a prolonged period of time, further confirming the maintenance of the unconventional asset purchase measures until March 2017 at least, or later if necessary, and revealing its readiness to use all the instruments available to it under its mandate to ensure the return of inflation to levels consistent with its medium-term objective.

GDP GROWTH AND FORECASTS

CHART 1.4



SOURCES: INE, Eurostat and Banco de España.

Spanish GDP retained its marked dynamism in recent quarters, although a gradual slowdown is expected in 2017-2018

In the first half of the current year Spanish GDP proved stronger than expected, posting a quarter-on-quarter growth rate of 0.8% in both Q1 and Q2, in line with the rates observed in the second half of 2015 (see Chart 1.4.B). While the flash estimate on Q3 also points to growth only marginally lower than that indicated (0.7%), the latest Banco de España projections (September 2016) continued to augur a slowdown in the next two years. This deceleration would be mainly underpinned by the tailing off of some of the expansionary impulses from 2015 and 2016, associated with the fall in oil prices, the significant improvement in financing conditions and the depreciation of the euro, as well as the expansionary fiscal policy stance. Accordingly, in 2016 as a whole, the increase in GDP is expected to be 3.2% (the same rate as the previous year), subsequently posting rates of 2.3% and 2.1%, respectively, in 2017 and 2018.

Inflation returned, after the summer, to slightly positive values

The year-on-year rate of change in consumer prices in Spain has returned to positive values, moving from –1.1% in March this year to 0.3% in September. This trend is expected to continue, meaning that year-on-year rates should continue to rise gradually over the coming months. Behind these developments, as is the case in the euro area, are the base effects of the previous falls in energy prices and also some recovery in the core components of inflation (the CPI excluding unprocessed food and energy), derived from the forecast progressive closing of the output gap.

A scenario of moderate recovery in the housing market is taking root

In the housing market, a scenario of moderately rising prices (3.9% year-on-year in Q2, according to the latest information from INE) and a pick-up in activity, both in terms of property transactions and of investment, appears to be firming. This is in a setting in which there is still a supply-side overhang (albeit a diminishing one) and in which demand is being driven by the economic recovery and favourable financial conditions.

The financial position of households and non-financial corporations has continued to improve

The financial position of Spanish households and non-financial corporations has continued to improve, on the whole, over recent months. The increase in income received and the reduction in the volumes of debt incurred led the debt ratios of both sectors to continue on their declining path, and they now stand close (in terms of GDP) to average euro area figures and notably below the highs reached during the crisis. At the same time, the current, exceptionally favourable financial conditions translate into historically low financial burden levels for both sectors. Lastly, total household net worth is also expected – on the latest available information – to have increased at a year-on-year rate of 1% in June this year.

In the public sector, the debt ratio is holding at high levels

In the public sector, the debt/GDP ratio rose from 99.8% to 101% in the first six months of the current year, interrupting the marginally declining trend of the second half of the previous year (see Chart 1.5). Nonetheless, the financial burden as a percentage of GDP, assisted by low financing costs, has been diminishing since early 2015. Further to the non-fulfilment of the budget deficit target set for 2015 in Spain, the European Commission reviewed our country's situation and decided not to impose a fine, while it put back two years (to 2018) the objective of attaining a deficit below 3% of GDP.

The nation's net lending capacity has been on a rising trend, although the net debtor position remains high

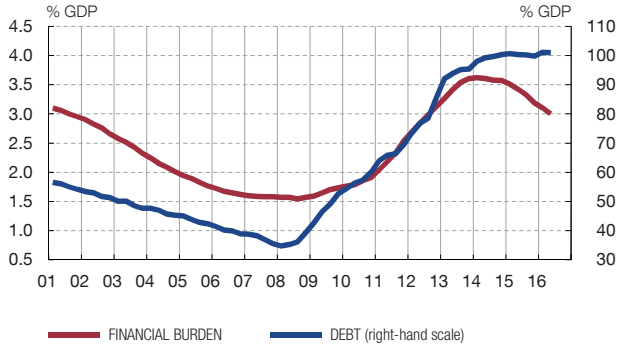
The favourable performance of the balance of goods and services and of that of income has enabled a net lending capacity to be maintained, a capacity that is even expected to have risen in the first half of the year.[3] Even so, Spain's net debtor position vis-à-vis the external sector (the net international investment position) remains, on information to 2016 Q2, at a high level (of 88.5% of GDP, compared with 89.9% at the close of 2015).

3 On still-provisional data, the cumulative 12-month figure is estimated to have risen from €22 billion in December 2015 to €26 billion in July 2016.

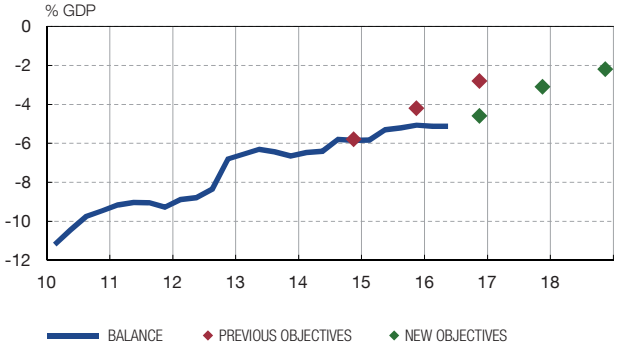
SPANISH PUBLIC FINANCES

CHART 1.5

A FINANCIAL BURDEN AND INDEBTNESS RATIO



B GENERAL GOVERNMENT BUDGET BALANCE
Four-quarter cumulated data



SOURCES: IGAE, INE and Banco de España.

Despite the favourable course of the Spanish economy over the recent period, certain factors of risk persist in the short and medium term, tied both to external and domestic constraints

Overall, the Spanish economy has in the recent period shown notable strength that has been accompanied by significant progress in the correction of some of the imbalances that originated during the pre-crisis expansion and during the crisis itself. However, part of this favourable performance has been due to temporary phenomena. And, at the same time, factors of vulnerability persist, linked to the high deficit and public debt levels, and the nation's sizeable financial needs vis-à-vis the external sector. As was the case six months ago, the assessment is that the risks of GDP trending more unfavourably than reflected in the baseline scenario of macroeconomic projections are more significant than those operating in the opposite direction. In addition to the external factors highlighted when analysing the euro area, the Spanish economy is exposed to domestic risks, especially those arising from the uncertainty surrounding the future course of economic policy and, in particular, the measures to be taken to comply with the budget deficit targets up to 2018 (agreed by the European Council in August) and the structural reforms required to raise the economy's potential growth rate.

This chapter assesses the main risks of Spanish deposit institutions. International exposure is analysed first, then domestic exposure, specifically focusing on the evolution of total assets, the behaviour of credit and of non-performing, foreclosed and forborne assets, and the related non-performing loan (NPL) ratio. Subsequently, the profitability of the banking system and, finally, its ability to withstand the risks considered, are analysed by studying the solvency of Spanish deposit institutions as a whole. This study will show not only the current capital levels of institutions and recent developments, but will also include a forward-looking analysis of their solvency over three years (2016-2018) and under certain macroeconomic scenarios.

2.1 Banking risks

2.1.1 CREDIT RISK

International exposure

The consolidated balance sheet is at a level similar to that as at June 2015, on account of the growth of business abroad,...

The consolidated total assets of Spanish deposit institutions, including both their business in Spain and that of their subsidiaries and branches abroad, amounted to €3,672 billion in June 2016, slightly higher than in June 2015 (year-on-year growth of 0.4%, see Annex 1)[1]. This growth is the result of the development of activity abroad, with a 15.5% increase in total financial assets at June 2016, compared with a year earlier. In business in Spain, however, total financial assets decreased by 2.2% year-on-year.

...which offsets the decline in business activity in Spain that has persisted since the onset of the crisis

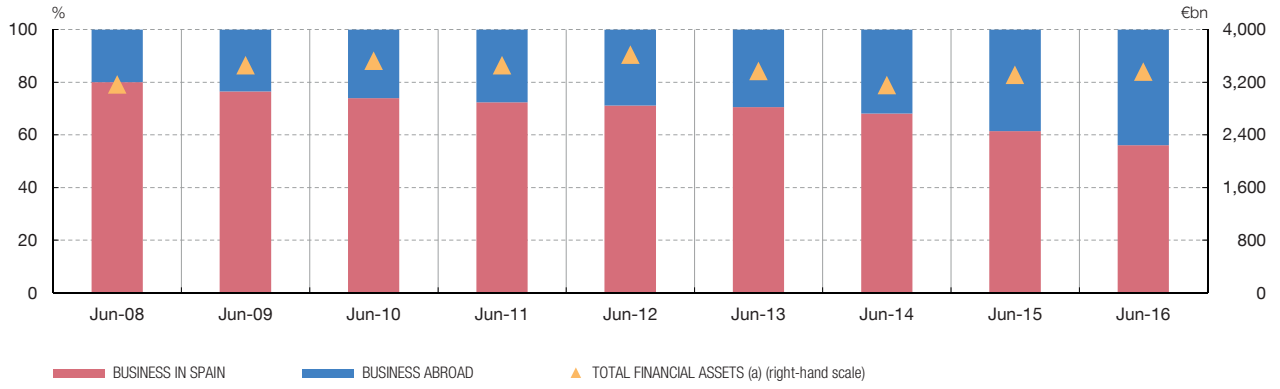
Since the beginning of the financial crisis in 2008, the performance of business abroad continues to be positive (see Chart 2.1), driven both by greater activity and by the evolution of the exchange rate.

The United Kingdom and the United States account for almost half of the international exposure of Spanish deposit institutions…

Particularly noteworthy is the relative importance of business in the United Kingdom and the United States (see Chart 2.2.A), which in June 2016 accounted for almost half of the total international exposure. The main changes in international exposures, both in relative and absolute terms, relate to the United Kingdom, the United States, Brazil and Turkey.

INTERNATIONAL EXPOSURE. FINANCIAL ASSETS
Deposit institutions

CHART 2.1



SOURCE: Banco de España.

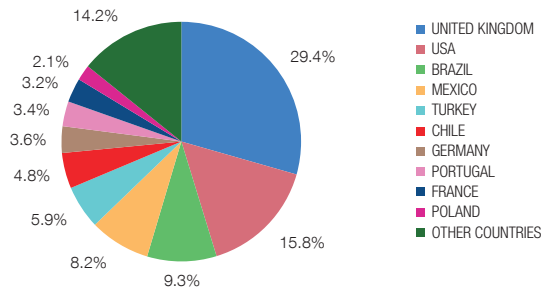
a Total financial assets include derivatives, equity instruments, debt securities, and loans and advances, and the distribution between business in Spain and business abroad is based on this magnitude.

1 Total financial assets account for more than 90% of the total balance sheet as at June 2016.

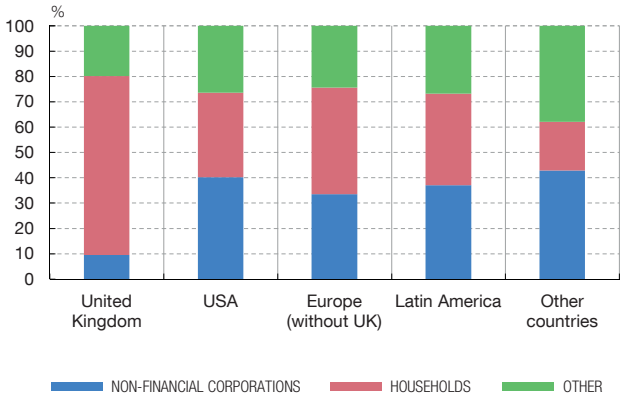
INTERNATIONAL EXPOSURE
Deposit institutions. June 2016

CHART 2.2

A GEOGRAPHICAL BREAKDOWN OF LOANS



B GEOGRAPHICAL BREAKDOWN OF LOANS BY COUNTERPARTY



SOURCE: Banco de España.

Specifically, the increase in exposures in the United Kingdom and Turkey is due to the acquisition of a British bank and of a controlling stake in a Turkish bank by two Spanish deposit institutions, respectively.

…and, in the United Kingdom, it is mainly concentrated in lending to households for home purchase

Credit exposure to the United Kingdom is restricted to three Spanish deposit institutions and it is mostly concentrated in lending to households (which accounts for 70% of the total loan portfolio in this country) and, in particular, for home purchase (see Chart 2.2.B). Conversely, in the United States, Europe (excluding the United Kingdom) and Latin America, loans to households account for a lending volume similar to that of loans to non-financial corporations (approximately 35%-40% of the total loan portfolio).

The increase in credit exposure abroad was accompanied by uneven developments in exchange rates

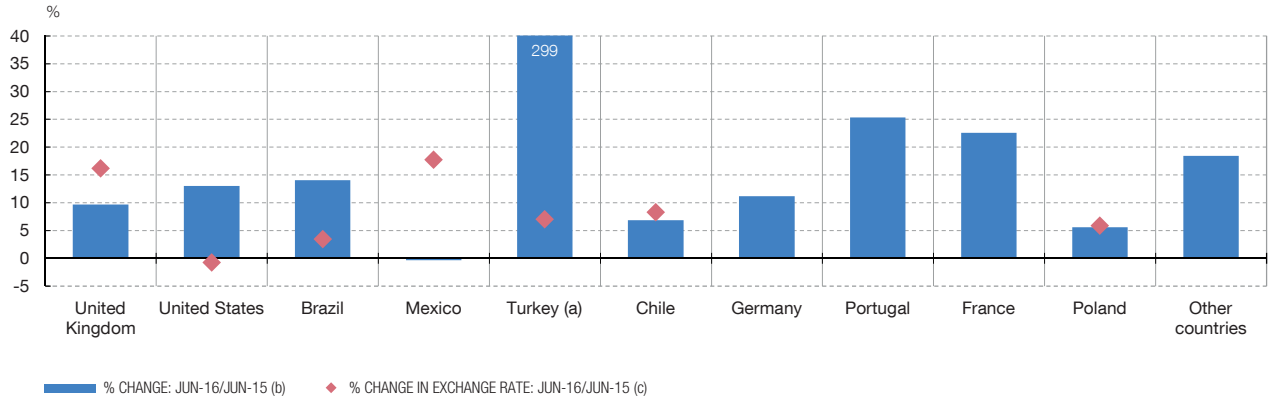
Chart 2.3 shows the percentage changes in the exposure arising from loan portfolios of the main countries where the Spanish institutions conduct their business abroad,[2] and the evolution of the exchange rates of currencies other than the euro in which such exposures are denominated. Specifically, the credit portfolio in the United Kingdom increased by 9.7% year-on-year despite the appreciation of the euro against sterling (16.2%). In the United States, the growth of the credit portfolio (13%) was not affected by the behaviour of the exchange rate, since the euro depreciated only by 0.8% against the dollar. In Latin America, the euro rose by 3.5% against the Brazilian real and by 8.3% against the Chilean peso, and the credit exposure to Brazil and Chile increased by 14.1% and 6.8%, respectively, which more than offset, therefore, the exchange rate effect. In Mexico, credit exposure fell slightly (–0.4%) as a result of the appreciation of the euro against the Mexican peso (17.7%). In the case of Turkey, despite the 7% depreciation of the Turkish lira, exposure grew substantially owing to the corporate transaction of a Spanish bank in that country.

With regard to financing to general government at total consolidated level, Annex 1 shows that its weight in the balance sheet grew from 14.8% of total assets at June 2015 to 15.1% at June 2016, whereas the weight of private sector financing in the balance sheet decreased by 0.8 percentage points (pp).

2 Only growth rates for those institutions that report data both as at June 2015 and June 2016 are considered, except in the case of UK exposures, where the increase mainly stems from the acquisition of a British bank by a Spanish deposit institution.

INTERNATIONAL EXPOSURE
Deposit institutions. Breakdown by residence of counterparty

CHART 2.3



SOURCE: Banco de España.

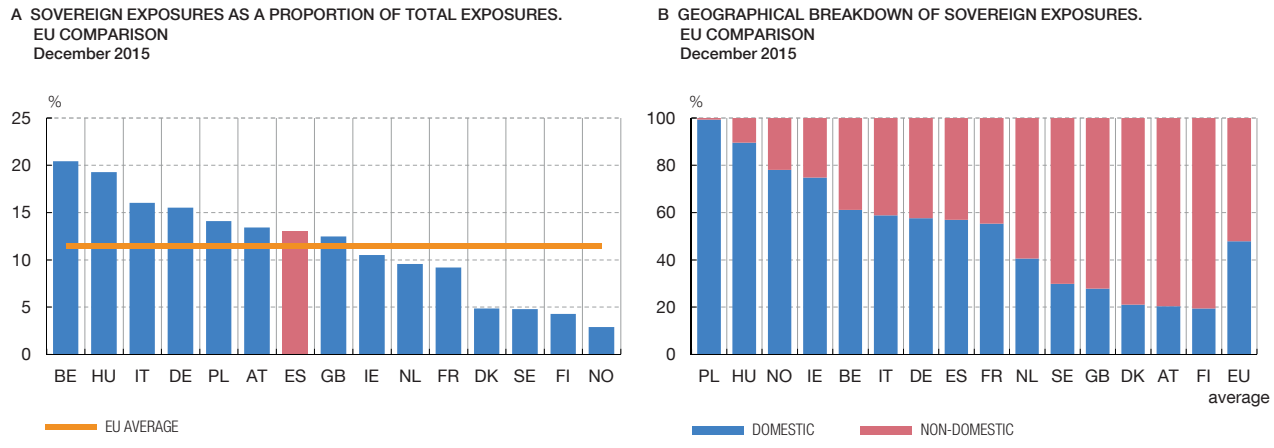
a The growth rate of the Turkish loan portfolio between June 2015 and June 2016 was 299%.
b Change in the exposure of deposit institutions that report data, both June 2015 and June 2016, except in the case of the United Kingdom where the increase stems from the acquisition of a British bank by a Spanish deposit institition.
c A positive (negative) value in growth rate means an appreciation (depreciation) of the euro against foreign currency.

The percentage of sovereign exposure at Spanish institutions is similar to the European average…

With respect to lending to the public sector, in particular sovereign risk, the European Banking Authority (EBA) published the results of the stress test for 2016 based on data relating to December 2015[3] for the European banking sector, which enables us to analyse, by country, European sovereign exposure. The data, aggregated by country, show that the volume of sovereign exposure of European banks ranges between 2.9% and 20.4% of total exposure (see Chart 2.4.A).[4] The percentage of sovereign exposure at Spanish banks is similar to the European average (13% for Spain and 11.5% for European banks as a whole).

SOVEREIGN RISK EXPOSURES. EU COMPARISON (a)

CHART 2.4



SOURCE: EBA.

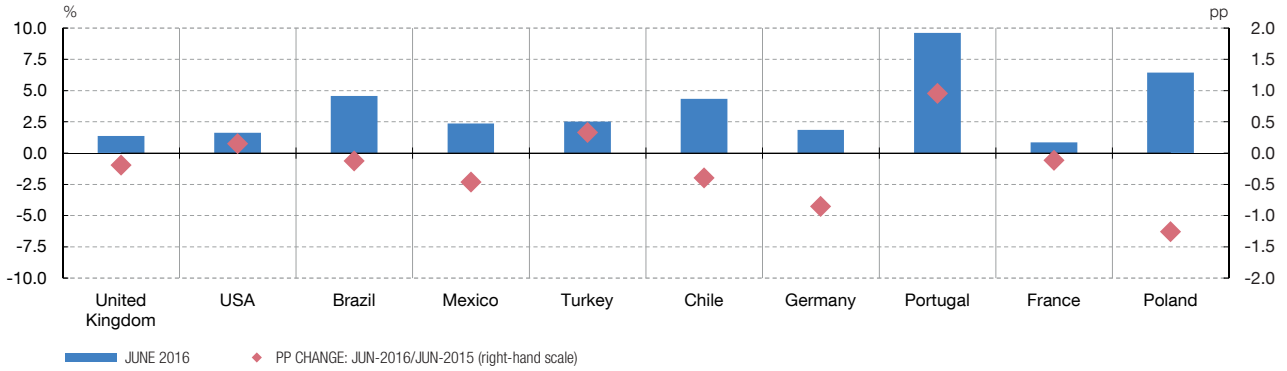
a The comparison is made for the 51 institutions that participated in the EBA 2016 stress test.

3 The results of the EBA stress test for 2016, on a sample of 51 of Europe's biggest banks, are available at http://www.eba.europe.eu/risk-analysis-and-data/eu-wide-stress-testing/2016/results, and are analysed in detail in Box 2.4
4 Exposure to sovereign risk was calculated using the net direct position as defined by EBA methodology for stress tests. The total exposure relates to the total value of credit exposures (on-balance sheet and off-balance sheet across all exposure categories for the purpose of calculating risk-weighted assets), also as defined by the EBA.

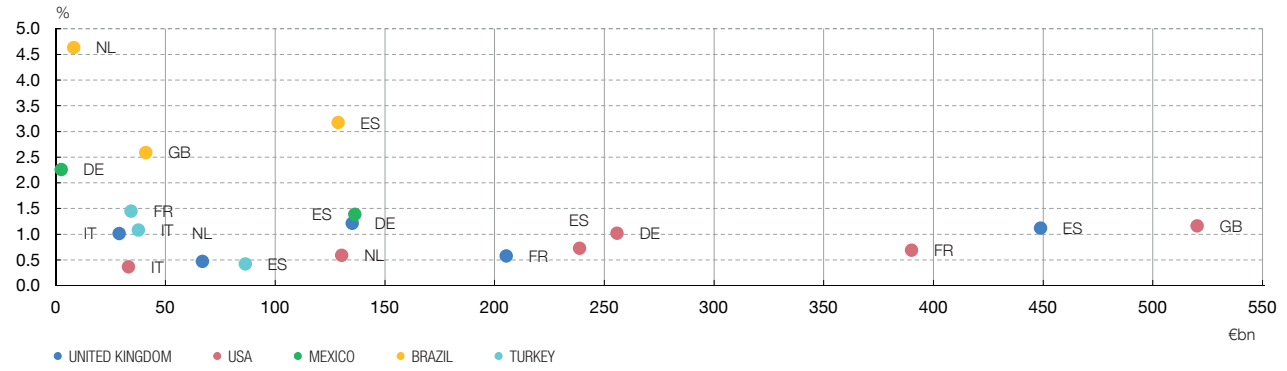
NPL RATIO

CHART 2.5

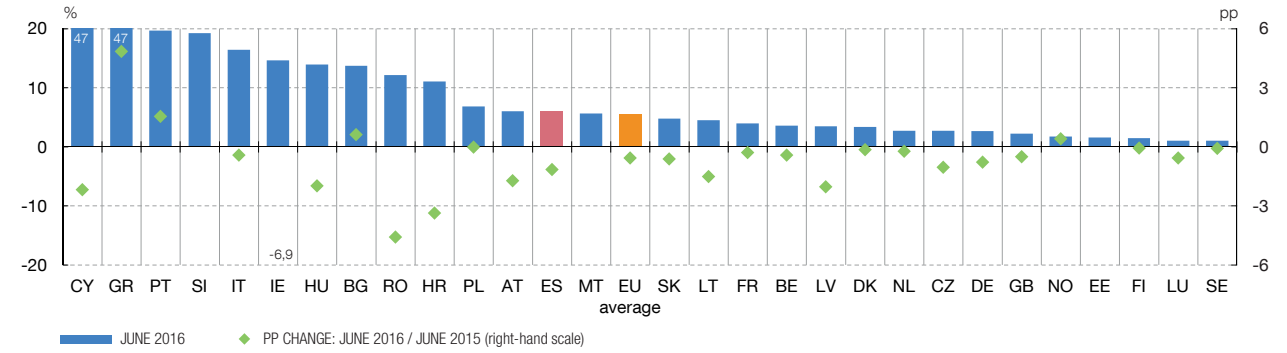
A INTERNATIONAL EXPOSURE



B EBA EU-WIDE STRESS TEST EXERCISE. RELATIONSHIP BETWEEN RATIO OF EXPOSURES IN DEFAULT (Y-AXIS) AND TOTAL EXPOSURES (X-AXIS) (a)
December 2015



C EU NPL RATIOS (b) (c)
June 2016



SOURCE: EBA.

a The comparison is made for the 51 institutions which participate in EBA 2016 stress test. Each point on the chart represents the country data indicated next to that point in reference to its activity in the country according to the colour of the legend.
b NPL ratio in Cyprus and Greece is 47.4% and 46.9%, respectively. NPL ratio change in Ireland is -6.9 pp.
c June 2015 data not available for the following countries: Slovenia, Malta and Estonia.

…and the proportion of domestic exposure is similar to that of German, French or Italian banks

As regards the geographical distribution of sovereign exposure by issuing country,[5] the volume of domestic exposures between countries is highly dispersed, ranging between 19.4% (Finland) and 99.3% (Poland) (see Chart 2.4.B). In Spain, domestic exposure as a proportion of total sovereign exposure (56.9%) exceeds the average for European banks (47.8%), but is similar to that of the major EU economies (57.5% in Germany, 55.2% in France and 58.8% in Italy).

5 Domestic sovereign exposure as a percentage of total sovereign exposure.

Non-performing loans

Non-performing loans at consolidated level fell by 13.7% in the past year,…

Non-performing loans at consolidated level continued to decline during the first half of 2016. Specifically, the year-on-year change at June 2016 was –13.7%, similar to that observed at December 2015, which means that consolidated non-performing loans decreased by more than €24 billion in the past year. This led to a substantial decline in the weight of non-performing loans in total assets at Spanish institutions, from 4.9% at June 2015 to 4.2% at June 2016.

…the NPL ratio reaching 5%

The NPL ratio for loans at consolidated level of Spanish deposit institutions declined by 0.9 pp to 5% in June 2016. In the case of loans to the private sector, the NPL ratio fell from 7.8% in June 2015 to 6.7% in June 2016. The NPL ratios associated with lending in the two countries in which Spanish banks have a large exposure, the United Kingdom and the United States, stand below 2%. Only in Portugal, Turkey and the United States has the NPL ratio increased, albeit by less than 1 pp (0.1 pp in the United States), whereas it fell in all the other countries (see Chart 2.5.A).

The ratio of exposures in default in countries where Spanish banks have higher exposure is lower than the average for the major European countries with exposures to such countries

Using the results of the 2016 stress test published by the EBA, based on data relating to December 2015, an estimate can be obtained of the NPL ratio by means of the ratio of exposures in default[6] in countries in which Spanish deposit institutions concentrate their activity abroad and, thus, it can be compared with those of other European countries whose banks also maintain exposures to such countries. This analysis was carried out in connection with the bank exposures of Spain, Germany, France, the United Kingdom, Italy and the Netherlands (those with a greater international exposure) to the United Kingdom, the United States, Mexico, Brazil and Turkey. In the case of Spain, the ratio of exposures in default stands, in general, below the average for the countries considered. Chart 2.5.B shows the ratios of exposures in default, together with the value of total exposures located in such countries.

At the European level, as at June 2016 a significant dispersion in the NPL ratio of the loan portfolio (which ranges from 1% in Sweden to 47% in Cyprus, see Chart 2.5.C),[7] and a reduction in the ratio relative to June 2015 in most European countries, can be observed. In Spain, the aggregate NPL ratio for the major Spanish deposit institutions decreased from 7.1% in June 2015 to 6% a year later (1.1 pp less), as compared with 5.5% at the European level (a decline of 0.5 pp).

Domestic exposure

Excluding financial corporations, lending to the resident private sector in the case of business in Spain continued to fall, albeit at more moderate rates

As at June 2016, lending to the resident private sector in business in Spain, analysed using the individual balance sheets of institutions, fell by 4.7% year-on-year. This fall is slightly higher than that observed at June 2015 year-on-year (–4.5%) (see Chart 2.6.A). However, the reason for this worsening is the behaviour of lending to financial corporations (investment funds, insurance companies, pension funds and other financial institutions other than monetary financial institutions), which declined sharply between June 2015 and June 2016. If only the household and non-financial corporation sectors are taken into account, lending decreased at June 2016 by 3.1%, a considerably more moderate fall than

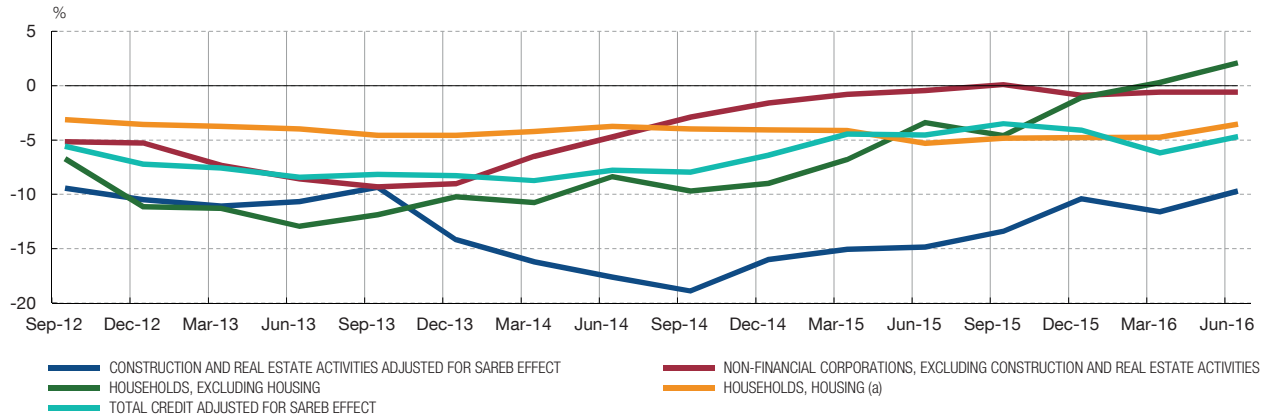
6 The exposure in default ratio is calculated as the ratio of exposure in default to total exposure, considering the value of exposure as that used to calculate risk weighted assets as defined by the COREP (see https://www.boe.es/doue/2014/191/L00001-01861.pdf).

7 These data relate to a sample of 198 banks, and are available at: http:/www.eba.europa.eu/risk-analysis-and-data/risk-dashboard.

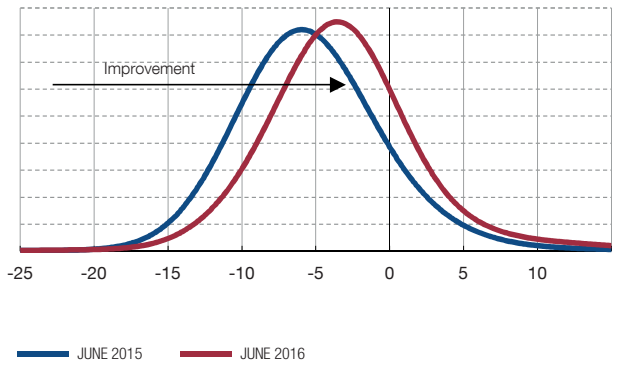
CREDIT TO THE RESIDENT PRIVATE SECTOR
Business in Spain, ID. Deposit institutions

CHART 2.6

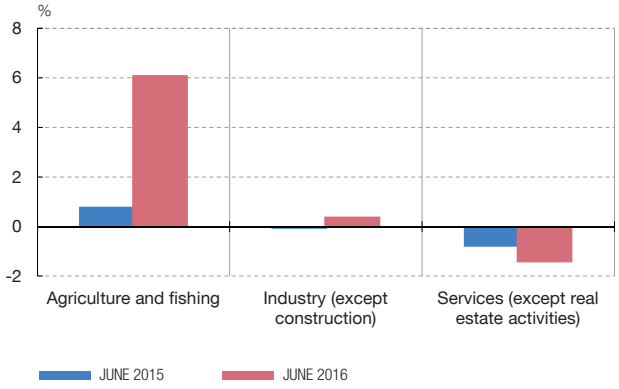
A YEAR-ON-YEAR RATE OF CHANGE IN CREDIT TO THE RESIDENT PRIVATE SECTOR BY SECTOR OF ACTIVITY



B DISTRIBUTION OF BANK CREDIT TO HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS IN TERMS OF YEAR-ON-YEAR RATE OF CHANGE (%) (b)



C YEAR-ON-YEAR RATE OF CHANGE IN CREDIT BY SECTOR OF ACTIVITY. NON-FINANCIAL CORPORATIONS EXCEPT CONSTRUCTION AND REAL ESTATE ACTIVITIES



SOURCE: Banco de España.

a Includes securitisations.
b The graph shows the density function (or frenquency distribution) of the year-on-year rate of change of credit for deposit institutions. This density function is approximated through a kernel estimator which allows a non-parametric estimate of the density function, yielding a continuous and smoothed graphical representation of that function.

at June 2015 (–5.3%). Chart 2.6.B shows the dispersion of institutions as regards the change in lending to households and non-financial corporations. The dispersion persisted between June 2015 and June 2016, and the distribution as a whole shifted to the right (lower rates of decline in lending). The latest monthly data available, relating to July 2016, show a continuation of the trend observed, reducing the year-on-year fall to 4.6%.

This moderation is observed for both households and non-financial corporations…

As mentioned above, Chart 2.6.A shows the rates of change in lending by institutional sector and branch of activity. A lower decline can be observed from mid-2014 for all sectors and branches. Lending to non-financial corporations fell by 3.6% year-on-year at June 2016, as compared with a decline of 5.7% observed a year earlier. The decline in lending to households also slowed down, with a 2.7% fall at June 2016, as compared with the –4.9% change at June 2015.

…and, among the latter, more significantly in lending to construction and real estate activities

By industry (see Chart 2.6.A), the decline in lending for construction and real estate activities was significantly tempered in the past year. At June 2016 the fall was 9.7%, as against 14.9% a year earlier. Lending to firms engaging in business other than construction

and real estate continued to decline at much more moderate rates (–0.5% at June 2016, substantially unchanged in the past year). However, differences in behaviour by sector were observed (see Chart 2.6.C), with notable growth in agriculture, animal production, forestry and fishing (6.1% in lending in the past year), and moderate decreases in lending to services other than real estate activities (–1.5%).

The decline in lending to SMEs increased and the decline in lending to large firms decreased…

By size, of the total lending to the resident private sector, lending to SMEs declined by 4.2% year-on-year at June 2016, a sharper fall than a year earlier (–0.2% at June 2015). Meanwhile, the decline in lending to large firms was substantially more moderate. Thus, at June 2015 the rate of decline year-on-year was 13.1%, as compared with 3.6% a year later. Accordingly, of the total lending to non-financial corporations, the weight of lending to SMEs decreased slightly from 52.5% at June 2016 to 52.1% a year later. Finally, lending to sole proprietors, which increased its weight in total lending to non-financial corporations (from 8.1% to 8.4%), grew at a rate of 0.9% year-on-year (as against a decline of 0.9% at June 2015). In any event, the high variability observed in these series makes it difficult to accurately assess the behaviour of lending by firm size.

…while all types of lending to households improved

The decline in year-on-year lending to households slowed down owing to the more moderate fall in loans for house purchase, specifically declining by 3.5% at June 2016, against –5.3% a year earlier. Lending to households for other purposes (basically consumer credit) posted positive rates of change (2.1%) for the first time, in general, since the onset of the crisis. This increase in consumer credit coincides with the favourable performance of this GDP component and with the interest of banks in lending at more profitable rates.

The percentage of mortgage lending with high and average LTV ratios has remained relatively stable in recent years

With respect to lending to households for house purchase, it is useful to analyse the behaviour in the last few years of the loan-to-value (LTV) ratio, i.e. the ratio of the outstanding balance of the loan to the appraised value of the property used as collateral. In the last five years, the percentage of mortgage loans whose LTV ratio exceeds 80%, i.e. the proportion of lending with a higher risk outstanding, has remained relatively consistent at around 15% (see Chart 2.7.A). Also, the average LTV ratio[8] using data as at June 2016 is 57.1% and in the last five years it has remained stable between 57% and 58%. The decrease in real estate prices (see Chart 2.12.B) from 2011 to 2014 was accompanied by a contraction of mortgage lending (LTV numerator), which has kept the LTV ratios stable (see Chart 2.7.A). Also, the distribution of mortgage lending to households for house purchase by institutions on the basis of their average LTV ratio has hardly changed between December 2011 and December 2015 and most of the average LTV at those dates ranged between 45% and 70% (see Chart 2.7.B).

The approval rates for lending to non-financial corporations remained stable last year…

The approval rate of the loans to non-financial corporations starting a new relationship with a bank has remained stable since mid-2015. This is due to a higher increase in requests than in loan approvals, although the two figures show stable year-on-year growth. By business line (construction and real estate and other firms), approval rate levels are similar.

…and interest rates continued the downward trend of recent years

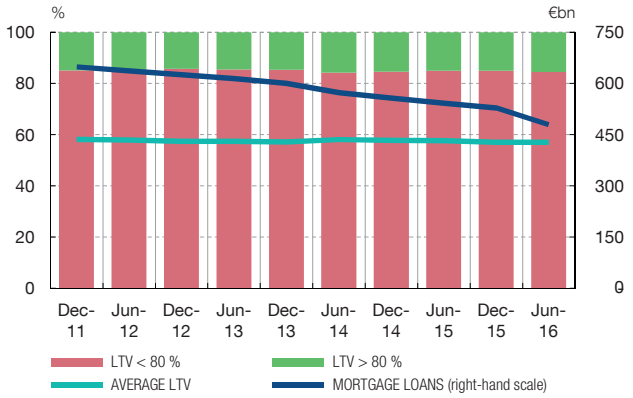
Interest rates on new loans by Spanish deposit institutions continued in the past year on the moderate downward path initiated in 2014, reflecting a relative improvement in credit conditions available to households and non-financial corporations (see Chart 2.7.D). The difference between the interest rates charged to non-financial corporations on new loans, depending on the size of the loan, continued to decline, owing to the larger reduction in rates on smaller loans.

8 See the footnote to Chart 2.7.A for the average LTV calculation.

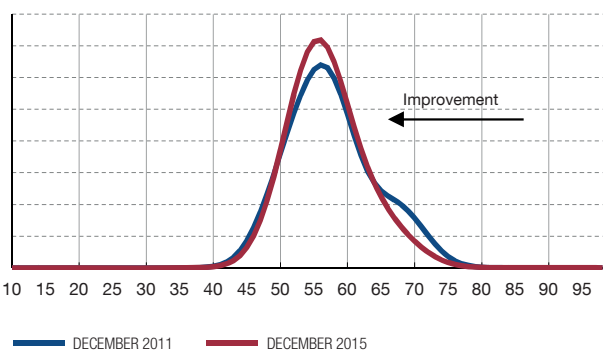
FUNDING CONDITIONS AND MORTGAGE CREDIT
Business in Spain, ID. Deposit institutions

CHART 2.7

A MORTGAGE LOANS. LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE. DISTRIBUTION BY LTV (a)

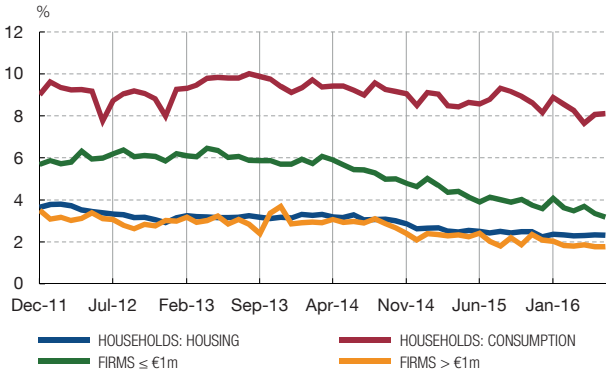


B DISTRIBUTION OF MORTGAGE LOANS FOR HOUSE PURCHASE, BY AVERAGE LTV (%) (b)



C ACCEPTANCE RATE OF LOAN APPLICATIONS (c)

D NEW LOAN INTEREST RATES (APR) (b)



SOURCE: Banco de España.

a Data from public statements detailing information on the financing of construction and real estate activities, established on the basis of Banco de España Circular 5/2011, have been used to calculate LTV values. In this report, deposit institutions also report house-purchase mortgage loans by tranches according to the percentage accounted for by total risk in the amount of the latest appraisal. Thus, to calculate the average LTV, a figure of 20% is considered for amounts that are classified in the tranche with an LTV not exceeding 40%, 50% for amounts in the tranche with an LTV of over 40% but less than 60%, 70% for amounts with an LTV above 60% but less than 80%, 90% for amounts with an LTV above 80% and equal to or less than 100%, and 100% for amounts with an LTV over 100%.

b The graph shows the density function (or frequency distribution) of house-purchase mortgage loans to households LTV. This density function is approximated through a kernel estimator which allows a non-parametric estimate of the density function, yielding a continuous and smoothed graphical repersentation of that function.

c Non-financial corporations which apply for a loan to an institution with which they are not working or with which they have not maintained a credit relationship in the last three months. The acceptance rate is defined as the ratio of the transactions accepted by deposit institutions to the total applications received in a particular month.

d The new loans of a period are defined as all the first-time loans arranged with customers and all the contracts existing in earlier periods whose amount, interest rate, maturity or other significant financial conditions in relation to interest rates have been renegotiated with customers in the month in question.

Troubled assets

Non-performing loans continued to fall in the past year…

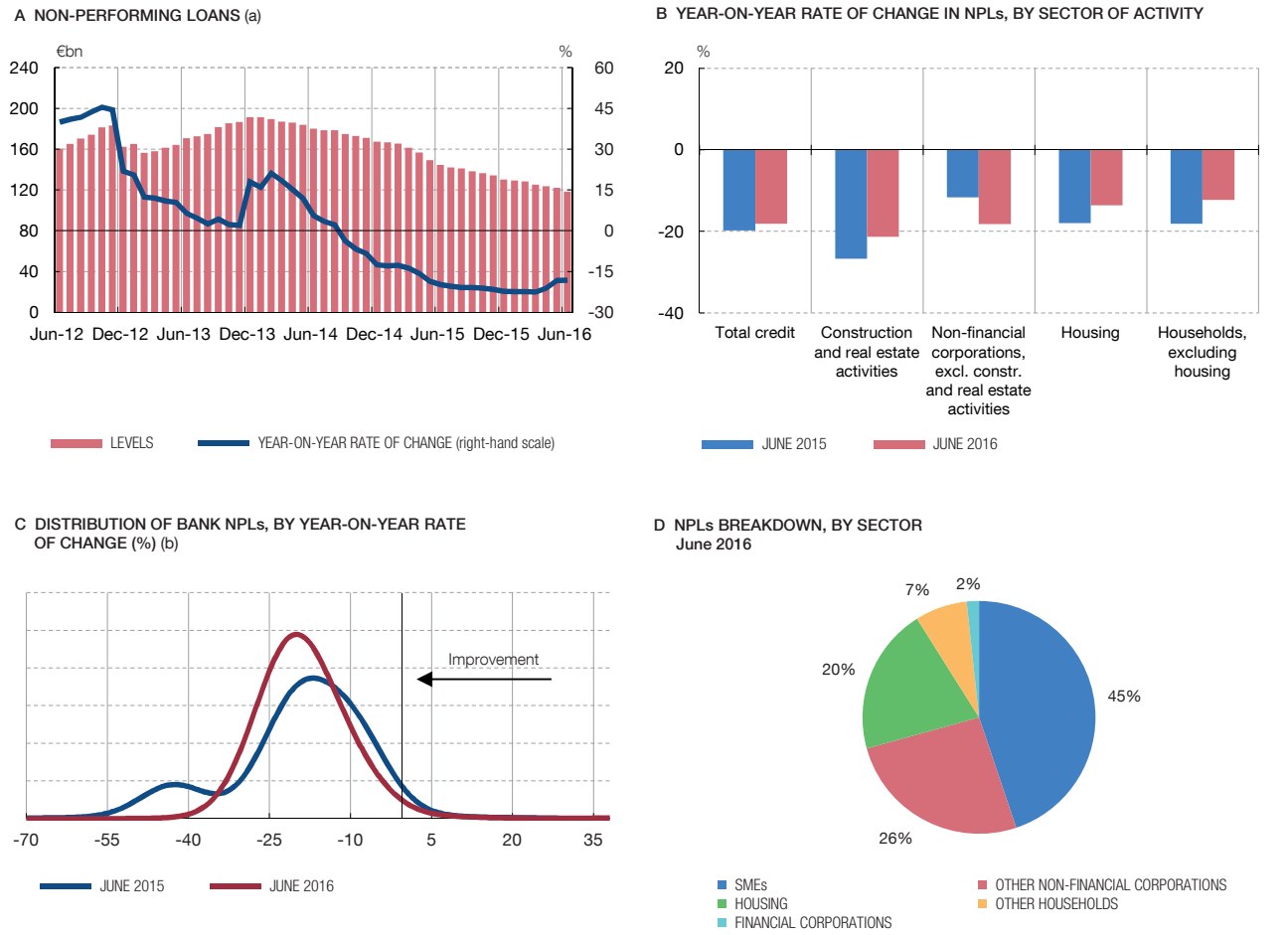
As regards the impact of credit risk, non-performing loans continued to decrease between June 2015 and June 2016. Specifically, the year-on-year rate of change of these assets was –18.2%, somewhat lower than that seen a year earlier (–19.8%) and, most notably, lower than those of recent months (–22.3% at December 2015 or –22.5% at March 2016). In any event, as Chart 2.8.A depicts, the fall in non-performing loans was very sharp in the last few years, with the total volume of such assets decreasing by more than €73 billion from December 2013 to June 2016, an accumulated decline of more than 38%.

…with differing intensity but broad-based across...

By institutional sector and industry (see Chart 2.8.B), non-performing loans decreased in the past year, both in households and in non-financial corporations, albeit with differing intensity. Noteworthy in the case of households was the deceleration of non-performing

NPLs. RESIDENT PRIVATE SECTOR
Business in Spain, ID. Deposit institutions

CHART 2.8



SOURCE: Banco de España.

a The transfers to Sareb by Group 1 and Group 2 banks in December 2012 and February 2013 affect the rates of change in those periods.
b The graph shows the density function (or frequency distribution) of the year-on-year rate of change of credit for Spanish deposit institutions. This density function is approximated through a kernel estimator which allows a non-parametric estimate of the density function, yielding a continuous and smoothed graphical representation of that function.

...institutional sectors, industries...

loans in consumer credit, which fell at June 2016 by 12.3% year-on-year, as against an 18.2% drop a year earlier. Conversely, non-performing loans in credit for activities other than real estate and construction (other lines of business) accelerated their rate of decline in the past year, which fell by 11.7% at June 2015 year-on-year and by 18.2% at June 2016.

...and also across institutions

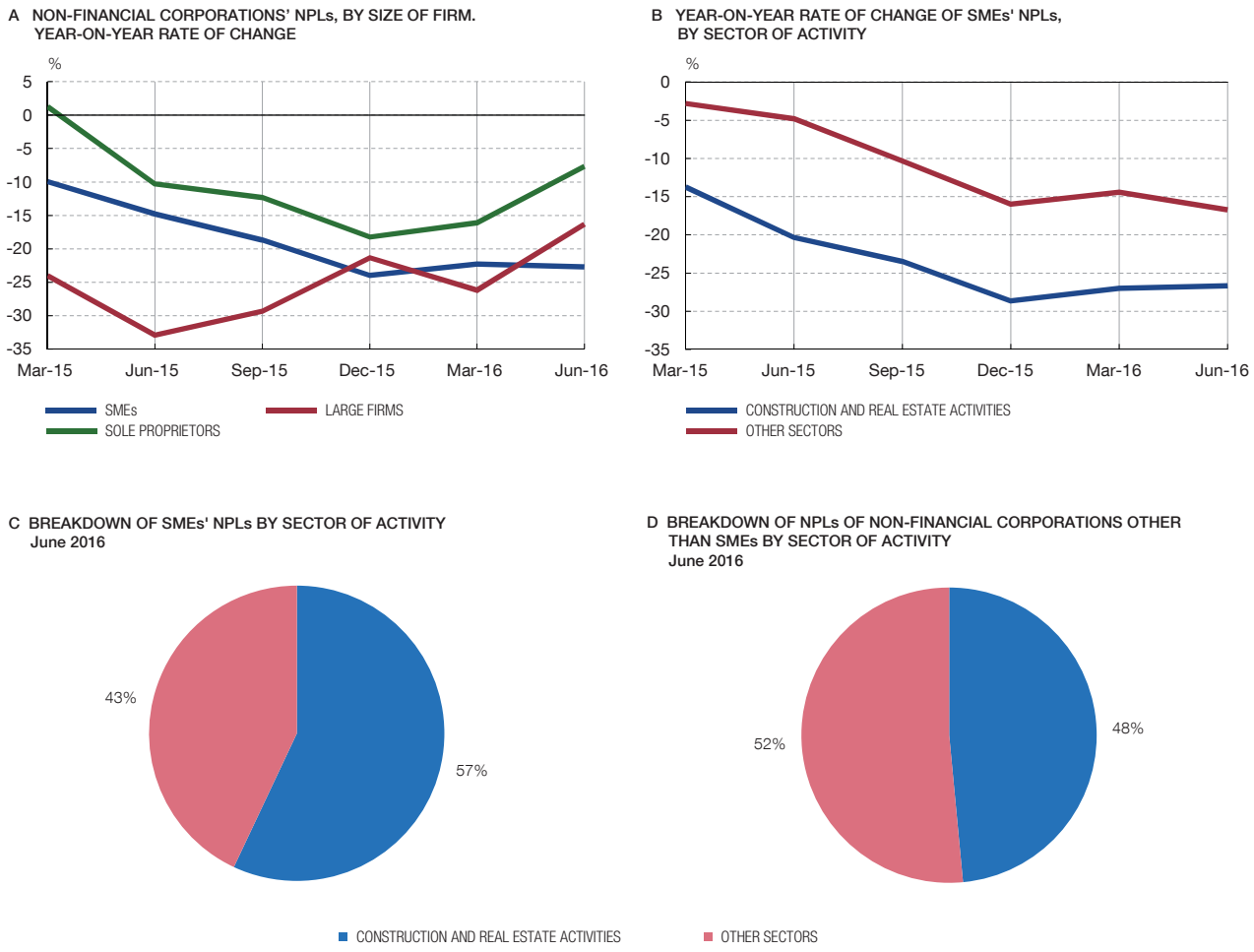
Chart 2.8.C shows the distribution of the rate of change of non-performing loans by institution. As can be observed, the decrease in non-performing loans was the norm among institutions. Additionally, in the past year there was a greater concentration of institutions in similar rates of change, which points to a more consistent behaviour than in the preceding year. Notably, of total non-performing loans, in June 2016 45% related to lending to SMEs, while 26% of the total related to all other non-financial corporations. Also, the weight of non-performing loans in lending to households for house purchase and other purposes as a percentage of the total was 20% and 7%, respectively. Lastly, 2% related to non-performing loans in lending to financial corporations (see Chart 2.8.D).

The decrease in non-performing loans was greater in SMEs than in other firms...

The reduction in non-performing loans was seen in all firm size categories (see Chart 2.9.A). Declines were sharper among SMEs, which reduced non-performing loans by 22.7% year-on-year, accelerating the fall from 14.8% observed at June 2015. In the case

NON-FINANCIAL CORPORATIONS' NPLs, BY SIZE OF FIRM
Business in Spain, ID. Deposit institutions

CHART 2.9



SOURCE: Banco de España.

of large firms and sole proprietors, the rates of decline in non-performing loans decreased in the past year.

...especially in construction and real estate activities

By sector of activity, among SMEs, real estate and construction activities recorded the most significant decline in non-performing loans at June 2016 (–26.7%). The remaining sectors recorded a more moderate aggregate decline of 16.7% in year-on-year terms (see Chart 2.9.B). These developments gave rise to a change in the distribution of non-performing loans among SMEs in the past year, with a reduction of the weight of loans to construction and real estate activities (see Chart 2.9.C). Nevertheless, the weight of non-performing loans in this sector continues to be greater for SMEs than for other non-financial corporations (see Chart 2.9.D).

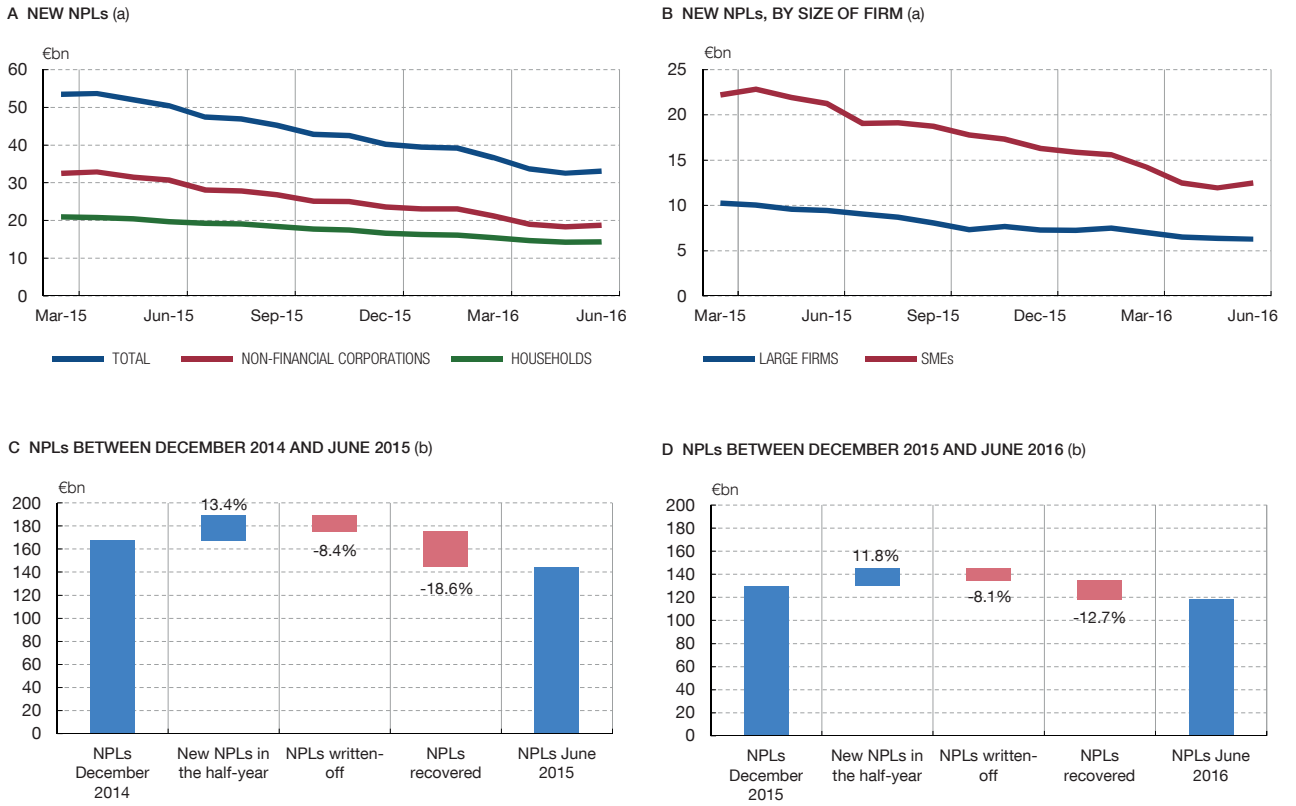
In the first half of 2016 there was a decrease in new non-performing loans and a lower volume of recoveries with respect to a year earlier

New non-performing loans in the resident private sector (non-financial corporations and households) in 2016 Q2 decreased by 36.1%, as compared with those classified as non-performing in 2015 Q2 (see Chart 2.10.A). The decrease in new non-performing loans of non-financial corporations was recorded both for SMEs (–33.9% in Q2 in year-on-year terms) and for large corporations (–42.7%, see Chart 2.10.B).

Charts 2.10.C. and D enable the behaviour of non-performing loans and their inflows and outflows in the first half of 2015 and 2016, respectively, to be compared. The decrease in the absolute value of non-performing loans was smaller in the first half of 2016, despite

RESIDENT PRIVATE SECTOR NPLs
Business in Spain, ID. Deposit institutions

CHART 2.10



SOURCE: Banco de España.

a In each month, the cummulative amount of the last 12 months is depicted (12-month moving average).
b Shown beside each bar is the percentage each item accounts for in total NPLs at the beginning of the period. NPLs recovered include both non-performing loans that become performing again and foreclosed assets.

the lower new non-performing loans. Specifically, the weight of new non-performing loans in existing non-performing loans was 11.8% in 2016 H1, as compared with 13.4% in 2015 H1. The volume of transfers to write-offs was slightly lower in 2016 H1 (8.1%) than in 2015 (8.4%). Lastly, recoveries of non-performing loans were lower in 2016 (12.7%) than in 2015 (18.6%).

The resident private sector NPL ratio continued to decline in the past year…

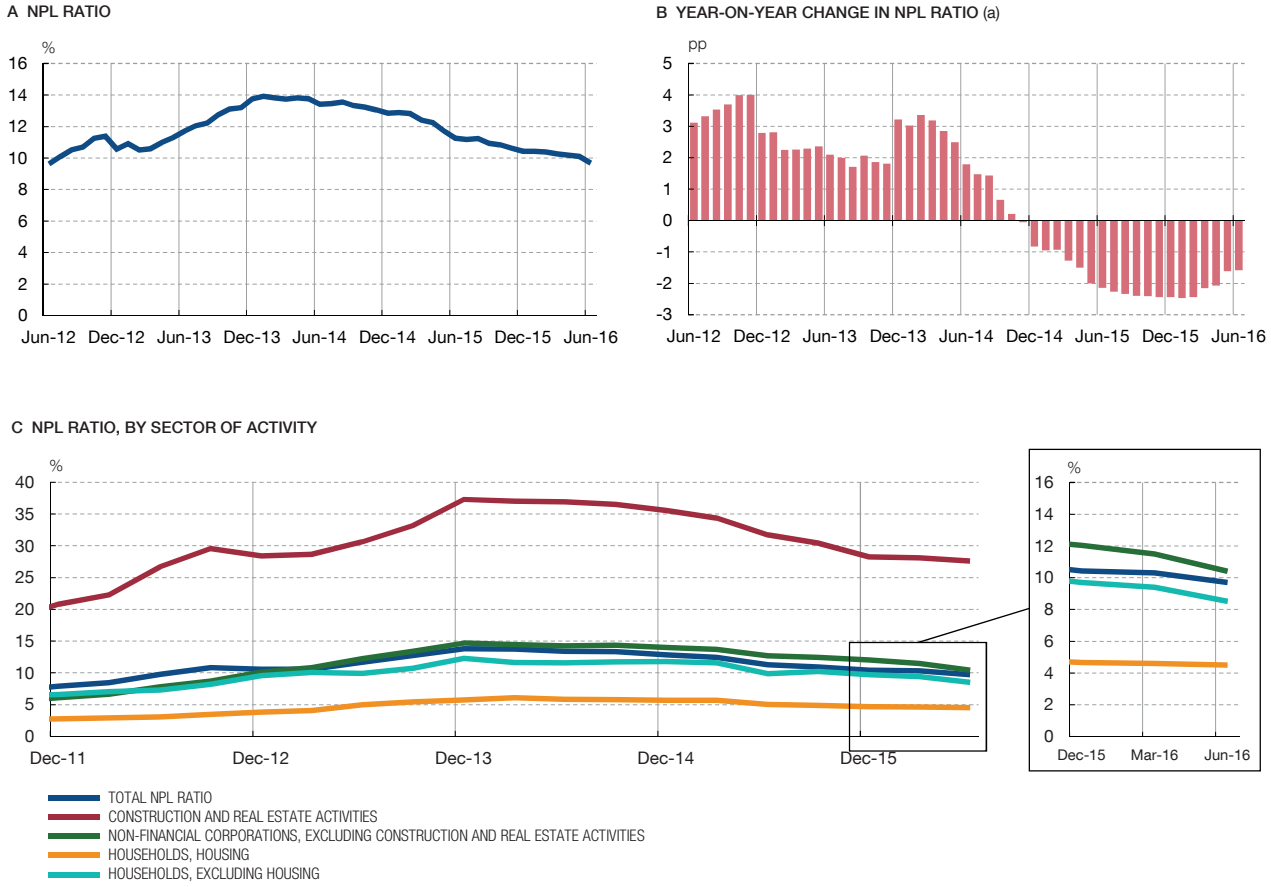
In relative terms, the NPL ratio of the resident private sector in Spain continued to decline in the past year (see Chart 2.11.A), because the decrease in non-performing loans (numerator) was sharper than the fall in total credit (denominator). The ratio stood at 9.7% in June 2016, 1.6 pp lower than a year earlier. As regards the year-on-year change in the NPL ratio (see Chart 2.11.B), not one month of growth has been recorded since it began to decline in 2015. However, a slowdown in the decline in the NPL ratio has been observed in the first half of 2016.

…and did so across all institutional sectors, loan types and firm size categories

By institutional sector and branch of activity, the NPL ratios of both households and non-financial corporations decreased (see Chart 2.11.C). In the case of households, the ratio fell by 0.7 pp between June 2015 and June 2016 to 5.2%. The decline occurred both in the NPL ratio for loans for house purchase (–0.5 pp, to 4.5%) and for other loans (–1.3 pp, to 8.7%). The NPL ratio of non-financial corporations also decreased, in this case by 3.2 pp, to 15.7%. The greatest decline arose in construction and real estate activities as a whole, reaching an NPL ratio of 27.6% after falling 4.1 pp in 2016. The ratio for other sectors decreased by 2.3 pp to 10.4%. By firm size, the most significant decrease in the NPL ratio

NPL RATIO. RESIDENT PRIVATE SECTOR
Business in Spain, ID. Deposit institutions

CHART 2.11



SOURCE: Banco de España.

a The transfers to Sareb by Group 1 and Group 2 banks in December 2012 and February 2013 affect the rates of change in those periods.
b The graph shows the density function (or frequency distribution) of the NPL ratio for Spanish deposit institutions. This density function is approximated through a kernel estimator which allows a non-parametric estimate of the density function, yielding a continuous and smoothed graphical representation of that function.

related to SMEs (–3.5 pp, to 20.5%), although the starting point for the ratio was substantially higher than for other firms. Large corporations saw their NPL ratio decline to 11.5% in June 2016, while at sole proprietors the ratio decreased by 1 pp to 10.4% (see Chart 2.11.D). The decrease in the NPL ratio was the norm among institutions (see Chart 2.11.E).

In connection with credit risk, Box 2.1 includes the main features of Banco de España Circular 4/2016 implementing the general framework for management of credit risk and certain accounting matters, including credit transaction classification and provisioning estimates.

The accounting regime of Spanish credit institutions is regulated by Banco de España Circular 4/2004 on public and confidential financial reporting rules and formats. Annex IX thereto on analysis and coverage of credit risk establishes a general accounting framework for credit risk management and criteria for accounting classification and estimation of provisions for credit risk.

The purpose of the amendment of Annex IX implemented by Banco de España Circular 4/2016 of 27 April 2016, which came into force on 1 October 2016, is to update Annex IX so as to include the most recent developments in banking regulation and the best practices identified in credit risk management and accounting.

The update of Annex IX is part of the process to improve and adapt Circular 4/2004 to promote the consistent application of the accounting framework comprised by the international financial reporting standards (IFRSs) adopted by the EU.

These improvements, which strengthen credit risk management, the proper classification of transactions, the appropriate treatment of collateral for accounting purposes and the soundness of provision estimates, will remain in force when IFRS 9 is adopted in the EU, without prejudice to the future amendment of Circular 4/2004 to replace the current "incurred loss" accounting model by the "expected loss" model.

Moreover, the various components relating to credit risk accounting that have been subject to updating and further development are key to be able to advance towards robust accounting models. The establishment of minimum requirements to be met by the accounting methods used by credit institutions was provided for by Circular 4/2004, although it was pending implementation. In particular, the new Annex IX establishes requirements to guide both the development of own methods for individual estimates of specific provisions and of internal methods for collective estimates of specific and generic provisions.

The five most significant components are described below:

1. Criteria for accounting classification of transactions: the distinction between standard and doubtful exposures is perfectly aligned with the FINREP definitions of "performing" and "non-performing". The convergence of the accounting treatment of forbearance with the European reporting standards established by the EBA is also strengthened. Transactions that are standard but present weaknesses should be classified under the new risk category as "standard exposures under special monitoring", in accordance with the guidelines and criteria of Annex IX. This new category includes, inter alia, forborne exposures under probation. Institutions must ensure at all times that the accounting classification of transactions is consistent with their level of provisioning for credit risk.

2. Governance and internal controls: boards of directors of credit institutions must be closely involved in the approval of accounting policies, also periodically monitoring their implementation in accordance with the principles and requirements established in Annex IX. The involvement of boards of directors is also required for approval of the procedures for reporting to the Banco de España relevant information on internal validation, initial and periodic, of internal accounting methods.

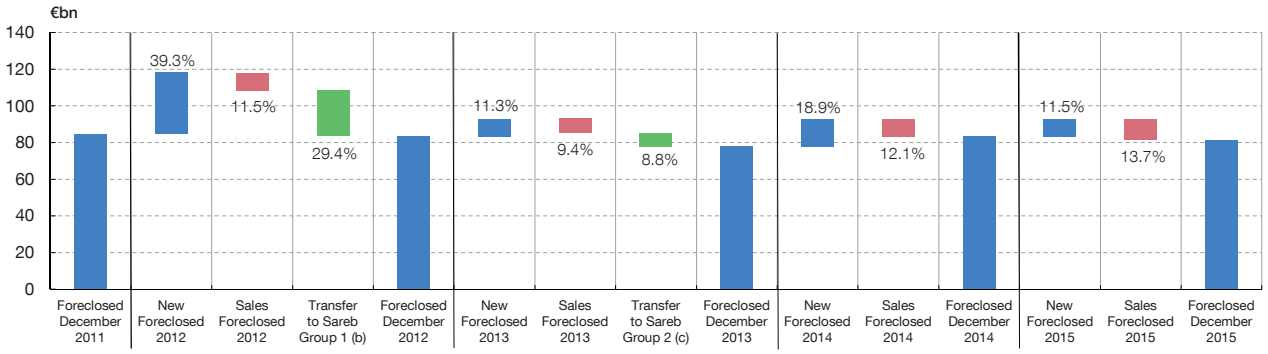
   The internal control function is also strengthened, particularly in connection with information systems and databases, the quality and consistency of which are central to develop methods to estimate provisions and for decision-making at all levels of management, including the board of directors.

3. Effectiveness and simplicity in the development of accounting methods: any complexity not involving an obvious improvement in the quality and consistency of the results obtained should be avoided. Accounting methodologies should not be "black boxes", but should be comprehensible and offer results that are understandable and realistic. For this purpose, institutions should establish periodic backtesting procedures to assess the accuracy of their provisioning estimates by comparing them with actual losses observed. Based on period backtesting, accounting methods should be fine-tuned on an ongoing basis to strengthen their effectiveness. As an additional support, periodic analyses of sensitivity and benchmarking exercises are required.

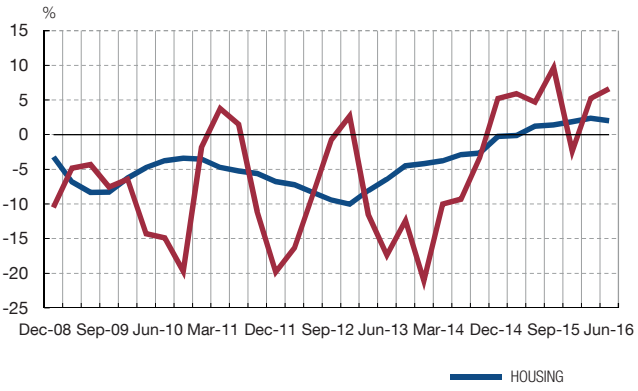
4. Collateral valuation policies: institutions are required to assess the effectiveness of collateral in order to be considered in estimating provisions, based on their experience. For this purpose, it is key for institutions to have databases with all the relevant information on collateral securing transactions and for these databases to be revised regularly by their internal audit department. Annex IX establishes the requirements relating to procedures and to the minimum frequencies for updating the value of collateral in order to be recorded as an effective means of mitigating credit risk. These requirements become more stringent as the accounting classification of risk worsens.

5. Principle of proportionality: in the case of institutions that have not developed internal methods for collective estimation of provisions, Annex IX offers alternative solutions (percentages for provisions and percentage discounts applied to the reference value of the collateral), calculated on the basis of Banco de España's information on the sector and experience.

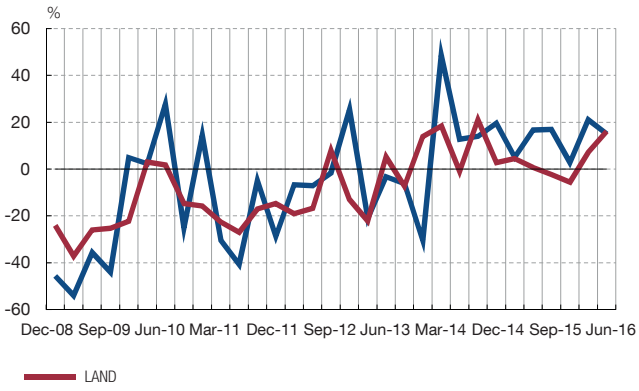
A FORECLOSED ASSETS BETWEEN DECEMBER 2011 AND DECEMBER 2015 (a)



B YEAR-ON-YEAR RATE OF CHANGE IN UNSUBSIDISED PRICES AND LAND



C YEAR-ON-YEAR RATE OF CHANGE IN NUMBER OF UNSUBSIDISED HOUSING AND LAND TRANSACTIONS



SOURCES: Banco de España and Ministerio de Fomento.

a Shown beside each bar is the percentage each item represents of the total foreclosed assets at the beginning of the year.
b Group 1 institutions were Banco Financiero y de Ahorros, NCG Banco, Catalunya Banc (currently integrated in BBVA) y Banco de Valencia (currently integrated in La Caixa).
c Group 2 institutions were BMN, Liberbank, Caja3 (currently integrated in Ibercaja) and CEISS (currently integrated in Unicaja).

Foreclosed assets decreased by 1.4% in the past year

The foreclosed assets, or assets received in payment of debts arising from business in Spain, held by Spanish banks on their balance sheets decreased by 1.4% in the past year to approximately €81 billion. The amount of foreclosed assets has decreased, albeit very moderately, in the last few years. 39% of total foreclosed assets are land, 25% are completed buildings and 22% are foreclosed assets arising from house purchases. Finally, buildings under construction accounted for 5% of the total in June 2016.

Chart 2.12.A shows the changes in recent years in the gross book value of the foreclosed assets, or assets received in payment of debts arising from business in Spain, recorded in the balance sheets of Spanish deposit institutions. Their value ranged from €85 billion to €81.5 billion between December 2011 and December 2015, respectively. Nonetheless, a more detailed analysis of these changes shows differing behaviour over the years.

Although the decrease in foreclosed assets between 2011 and 2013 arose from the transfers to Sareb…

Foreclosed assets decreased by €7 billion from December 2011 to December 2013, mainly as a result of the transfer of foreclosed assets to Sareb. The gross amount transferred totalled €32 billion; therefore, without these transfers, the foreclosed assets in the balance sheets of the institutions would have increased substantially during the more difficult years of the crisis.

…the decrease in foreclosed assets in 2015 arose from more buoyant sales

In 2014 foreclosed assets increased by more than €5 billion, since new foreclosures recorded in the balance sheets of institutions exceeded sales. However, this trend was reversed in 2015 for the first time in recent years. There were sales of foreclosed assets in excess of €11 billion (equal to 13.7% of the stock of foreclosed assets in early 2015), whereas additions of new foreclosures in the balance sheets did not reach €10 billion. In aggregate, foreclosed assets decreased by almost €2 billion (2.1%) during 2015.

The gradual recovery of the real estate market (see Charts 2.12.B and C) should enable banks to progressively reduce the amount of foreclosed assets in the next few years, thereby reducing the weight of these unproductive assets in their balance sheets and, accordingly, contributing to improve profitability. The sales of foreclosed assets in the last three years may be seen in greater detail in Box 2.2.

SALES OF FORECLOSED ASSETS IN THE SPANISH BANKING SECTOR (2012 – 2015) BOX 2.2

This box analyses the volume of foreclosed real estate assets that were sold in the period 2012-2015 by Spanish deposit institutions.

The data used in this box are taken from the inventory of foreclosed real estate assets in Spain in 2014 and 2015 and the annual sales of foreclosures during the period 2012-2015 of the institutions comprising the 14 groups subject to direct supervision by the Single Supervisory Mechanism (SSM), plus from those of another group of less significant institutions: two savings banks, four banks and the credit cooperatives, i.e. practically all of Spain's deposit institutions.

To facilitate the analysis, sales and inventories of foreclosed real estate assets have been grouped by type of asset, namely:

Chart A
SALES BY FORECLOSED ASSET TYPE. 2012-2015

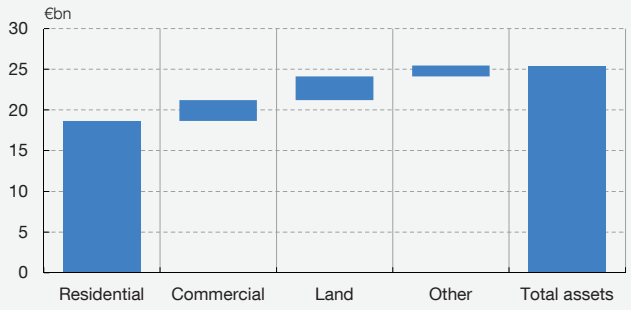


Chart B
SALES IN 2015 IN RESPECT OF STOCK IN 2014 (a)

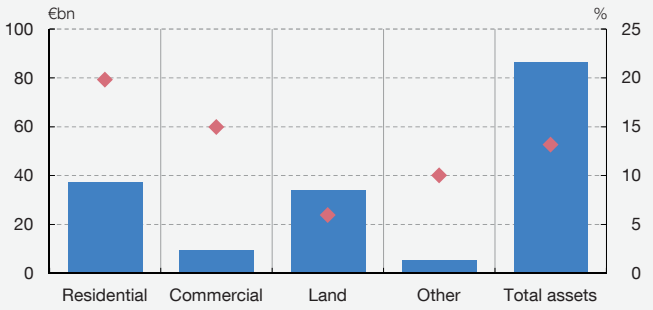
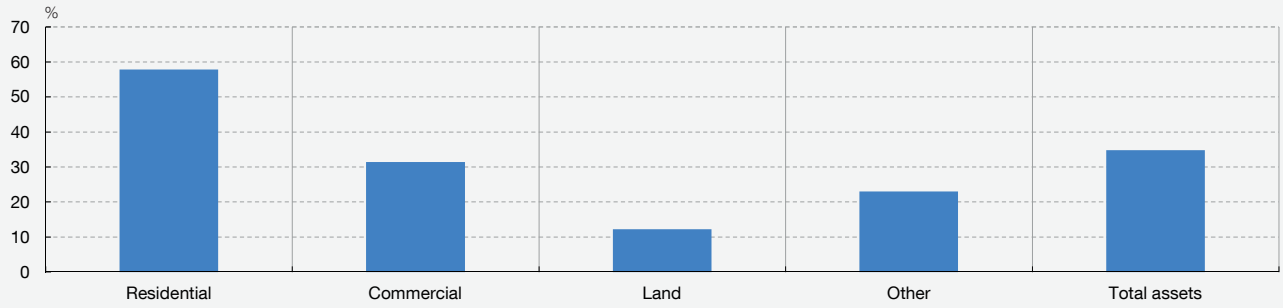


Chart C
SALES IN 2012-2015 AS A PERCENTAGE OF STOCK IN 2015, TOTAL INSTITUTIONS



SOURCE: Banco de España.

a Blue bars in the left-hand scale show gross book value of 2014 stock, by type of asset, and the dark red diamonds in the right-hand scale shows 2015 sales as a percentage of the gross book value of 2014 stock.

housing, commercial premises, industrial property, land and other real estate assets.

Chart A summarises the data for all the institutions. In 2012-2015 sales of real estate assets of Spanish deposit institutions amounted to nearly €25.5 billion, with house sales accounting for 73% of the total (€18.6 billion). Sales of commercial premises and land amounted to €2.5 billion and around €2.9 billion, respectively. Sales of other real estate assets (property development items, uncategorised assets, etc.) amounted to approximately €1.3 billion.

Chart B shows that most of the total volume of foreclosed assets as at December 2014 in the balance sheets of the institutions relates to houses (43% of the total volume of foreclosures, approximately €85 billion) and land (40% of the total). However, it can also be seen that the proportion of housing sales in 2015 to inventory in 2014 exceeds the figure for land sales slightly more than threefold. In other words, 20% of the €37 billion of houses in inventory in 2014 were sold in 2015, as compared with only 6% of the €34 billion recorded in the balance sheet as at December 2014, in the case of land.

Chart C analyses the volume of foreclosed sales over a longer period of time and shows that, on average, institutions have sold in 2012-2015 foreclosed assets for a value of approximately 35% of the inventoried value in 2015. By asset category, houses present the highest percentage of sales (58%) and land the lowest (12%).

In total, unproductive assets declined by 12% in 2016, although they still represent a significant proportion of the assets

Adding together non-performing loans and foreclosed assets produces a total of €199 billion of unproductive assets on the balance sheet as at June 2016, which do not generate revenues in the income statement. Total unproductive assets declined by 12% in the past year, but they still represent a significant proportion of banks' total assets in their business in Spain, putting downward pressure on their income statement and profitability.

Forborne credit declined again in the past year

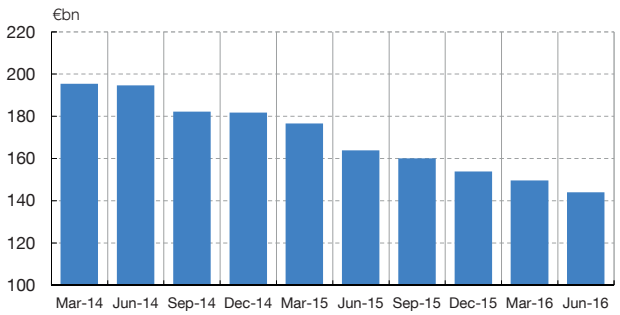
The total forborne credit to the resident private sector amounted to €143.9 billion in June 2016, after a year-on-year decline of 12.1%. This figure also reflects a continuation of the trend observed in recent quarters, although the year-on-year decline is somewhat more moderate (see Chart 2.13.A).

Of total forborne credit, 48% was non-performing in June 2016, a reduction of 1.2 pp in the past year. Also, the proportion of total forborne credit classified as substandard fell from 17.7% in June 2015 to 15.4% a year later. As a result, the proportion of total forborne credit classified as performing increased in 2016 by 3.4 pp, to 36.6% in June 2016 (see Chart 2.13.B).

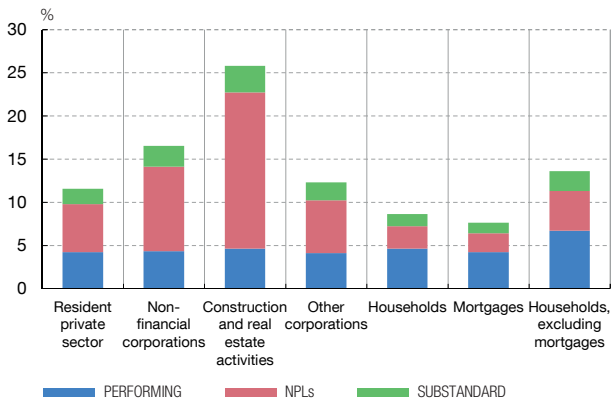
FORBORNE LOANS
Deposit institutions, ID

CHART 2.13

A VOLUME OF FORBORNE LOANS



B WEIGHT OF FORBORNE LOANS IN THEIR RESPECTIVE PORTFOLIOS AND COMPOSITION ACCORDING TO LOAN STATUS
June 2016



SOURCE: Banco de España.

In summary, ex-post credit risk, measured by means of different variables (non-performing loans, forborne exposures, foreclosed assets, in the form of stocks and flows), continued to improve since the last FSR was published, basically reflecting the stabilisation and improvement of economic and business activity, to which an environment of low interest rates contributes. In addition to the reduction of the volume of NPLs, an improvement in the momentum of lending is also relevant to continue on the path of declining NPL ratios.

2.1.2 SYSTEMIC RISK

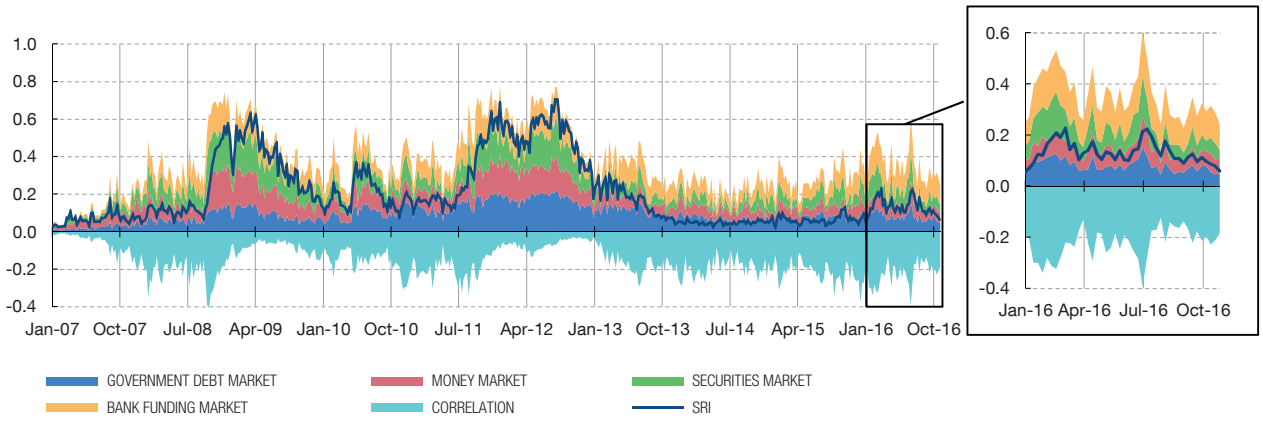
The SRI level rose in the early months of 2016 and in late June, but currently remains low

So far in 2016, two episodes have increased the level of the systemic risk indicator (SRI, see Chart 2.14.A). Firstly, at the beginning of the year and until the end of February, the greater uncertainty in the financial markets owing to, among other factors, lower growth projections, deceleration in emerging economies, low profitability of the banking business, more stringent regulatory requirements and other idiosyncratic elements relating to certain banking systems and institutions, led to downward corrections in the stock markets and a gradual increase in the SRI level, which fell back since then. The second episode was more abrupt and its cause more specific. As a result of the outcome of the United Kingdom EU membership referendum, in the last week of June and the first two weeks of July the SRI rose sharply to levels near those reached during the first episode of financial stress in early 2016. However, since mid-July the SRI has declined, reflecting lower levels of stress in the system, as has occurred in other countries.

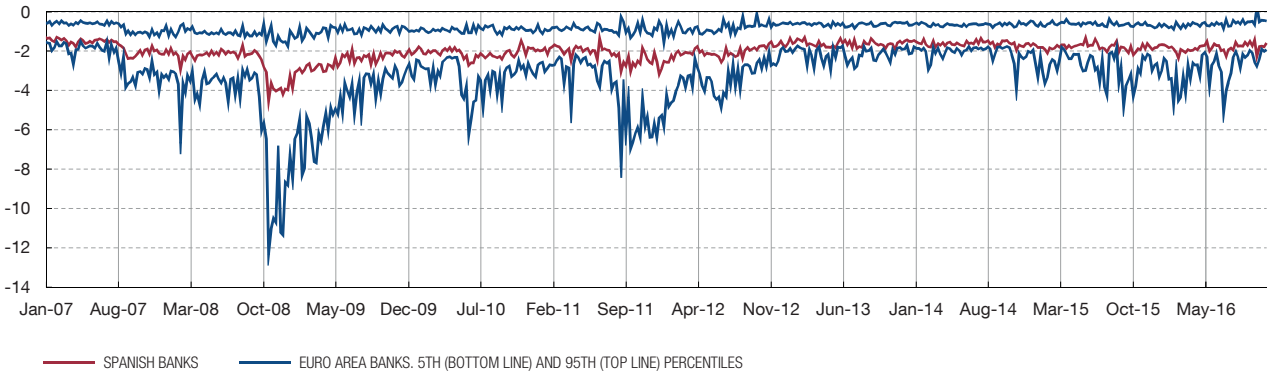
SYSTEMIC RISK

CHART 2.14

A SYSTEMIC RISK INDICATOR (SRI) (a)



B CONTRIBUTION OF SPANISH BANKS TO SYSTEMIC RISK MEASURED THROUGH CoVaR (b)



SOURCES: Datastream, ECB and Banco de España.

a For a detailed explanation of this indicator, see Box 1.1 in the May 2013 FSR.
b The CoVaR model is used to calculate the impact that a situation of bank stress would have on the financial system.

A CoVaR model may be used to quantify the contribution of Spanish banks to the systemic risk of the euro area as a whole.[9] The recent average CoVaR of Spanish banks has remained far from the levels of systemic risk reached between 2008 and 2013 (see Chart 2.14.B). However, minor isolated increases can be seen in the CoVaR that relate to bouts of turbulence that arose in early 2016 and following the British referendum, which have already fallen back to lower levels. Additionally, strong volatility persists in the 5th percentile of the CoVaR of European banks, which shows considerable heterogeneity in the contribution of different European banks to systemic risk.

2.1.3 FUNDING RISK

Euro area interbank market activity remained very weak...

Since the last FSR, euro area interbank market activity has remained very weak. Chart 2.15.A shows EONIA trading volume, which continued the downtrend initiated in January 2015 and in 2016 Q3 had fallen back to levels similar to the lows of end-2015. The Spanish interbank market performed similarly, with very low trading volumes in both the secured segment and the unsecured segment and only a minor role being played by the latter.

…against the background of the policy of liquidity provision by the Eurosystem

This lack of activity in the interbank markets is largely a consequence of the policy of liquidity provision by the Eurosystem through various asset purchase programmes and refinancing operations, the latter including a series of four targeted longer-term refinancing operations (TLTRO II) which began to be executed in June 2016. Chart 2.15.C shows the outstanding amount provided through ECB tenders, both for the Eurosystem as a whole and for institutions resident in Spain. It can be seen that European credit institutions, and Spanish ones in particular, have continued to have considerable recourse to Eurosystem funds and that the funding obtained has been retained by them through practically constant tenders during the past year. Indeed, from end-October 2015 to end-October 2016, the gross recourse increased for the Eurosystem as a whole by just 3.3% and decreased by 1.5% for Spain. Consequently, the loan to Spanish institutions as a percentage of the Eurosystem total remained unchanged, as shown by Chart 2.15.B, which sets out the volume of lending allotted in tenders to institutions resident in Spain as a percentage of the total provided by the Eurosystem. Specifically, in September 2016 the share of funds allotted to institutions resident in Spain stood at an average of 25.5%. However, this share becomes less and less representative as the Eurosystem purchase programme proceeds, because the relative importance of refinancing operations is decreasing. In fact, the liquidity provided by this latter mechanism, somewhat more than €500 billion, is approximately half of the amount provided by the Eurosystem through the purchase programme.

Regarding longer-term funding, in the first three quarters of 2016 Spanish deposit institutions have issued almost €8 billion of senior debt and more than €11 billion of covered bonds, while subordinated debt issues eligible as Tier 1 capital (AT1) and Tier 2 capital (T2) has been much more limited (see Chart 2.15.D). Issuance activity was concentrated in the first quarter of the year and decreased from then on, while financing conditions, as seen in Chart 2.15.E, improved during the year.

In the first three quarters of 2016, the amount of senior debt and covered bond issuance decreased with respect to the same period of 2015

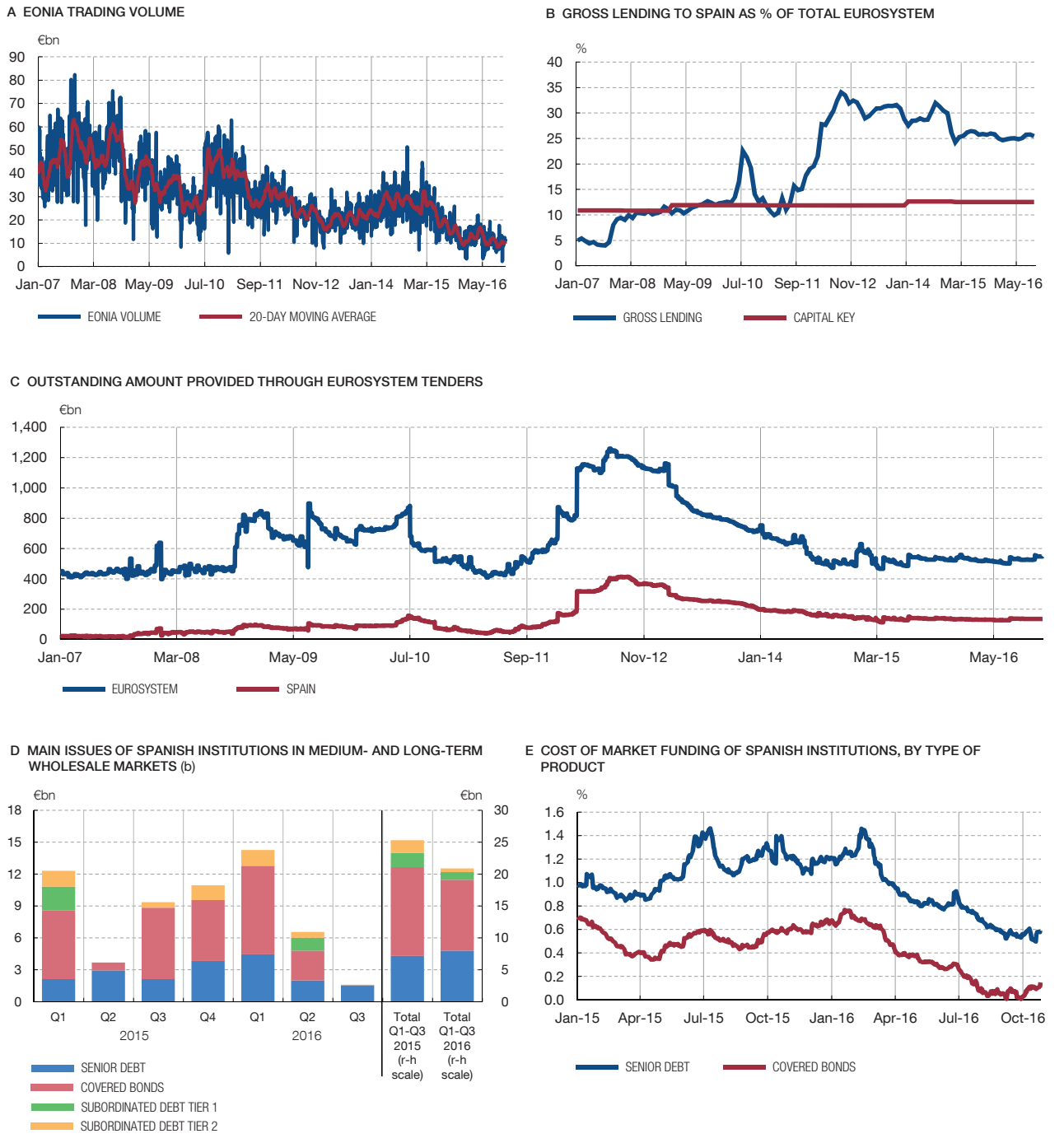
Relative to the first three quarters of last year, there was a slight increase in senior debt issuance and a decrease in covered bond issuance. Overall, the total issuance of these two types of debt declined with respect to 2015.

At consolidated level, private sector deposits grew by 1.9% at June 2016 in comparison with the same month of 2015, mainly due to the positive performance of business abroad,

9 For an explanation of the CoVaR model, see the May 2015 FSR.

WHOLESALE FUNDING (a)

CHART 2.15



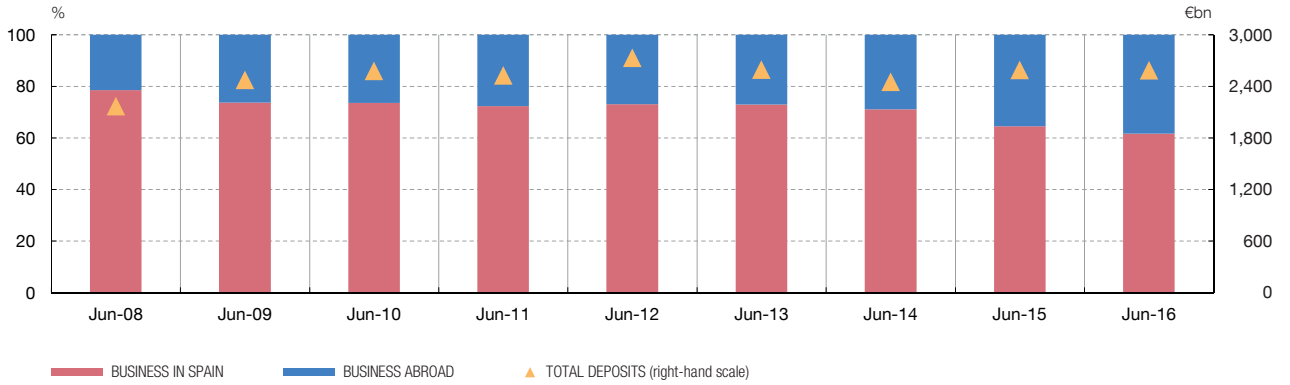
SOURCES: Bloomberg, Dealogic and Banco de España.

a Latest data: 26 October.
b Senior debt, covered bonds and subordinated debt tier I and tier II issues. Retained issues are not included.

where these deposits were up by 10.7% (see Chart 2.16). Particularly noteworthy is the relative importance of business in the UK and the USA (see Chart 2.17.A), which in June 2016 represented more than one-third of deposits abroad. Further, in the UK, Europe (excluding the UK) and the USA, the retail deposits taken by Spanish deposit institutions come mainly from households (especially in the UK, where deposits from households make up 73.4% of total deposits), and to a lesser extent from non-financial corporations. By contrast, in Latin America the proportions of total deposits that come from households and from non-financial corporations are similar (between 35% and 40%, see Chart 2.17.B).

INTERNATIONAL EXPOSURE. DEPOSITS
Deposit institutions

CHART 2.16



SOURCE: Banco de España.

Retail deposits recovered slightly in the past year, despite the continuing downward trend in interest rates

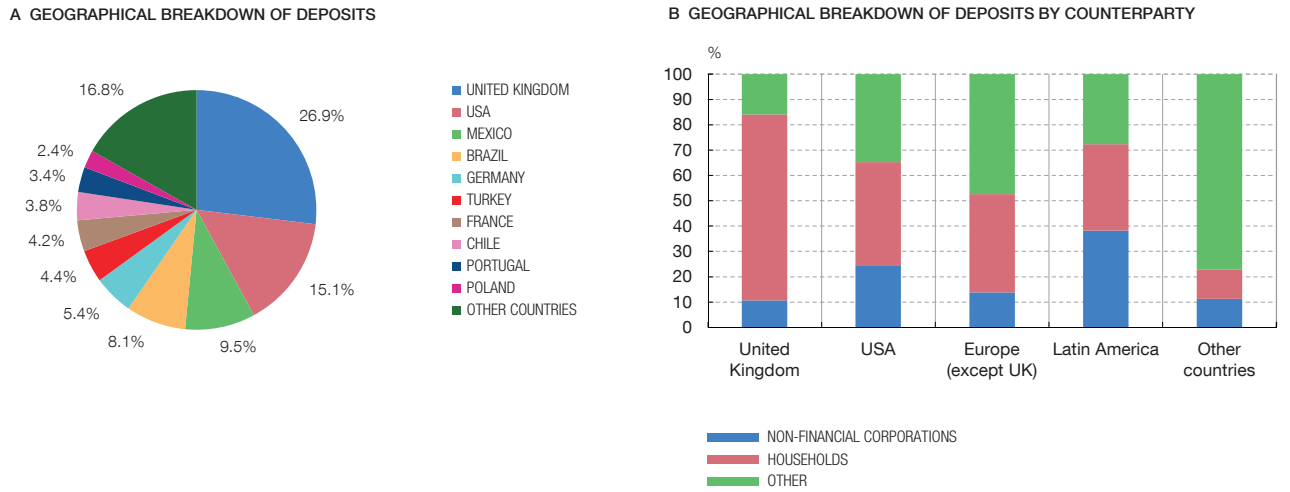
In the past year the interest rates on deposits continued their downward trend. Despite this, the retail deposits taken by Spanish institutions (deposits from households and non-financial corporations), analysed using data from individual financial statements, corresponding to business in Spain, grew by 2.8% year-on-year at June 2016 (see Chart 2.18.A), constituting an entrenchment of the upward trend in rates of change initiated in early 2015. Despite the low yield offered by deposits, the similarly low returns on their alternatives and the notable stock market volatility made the aforementioned recovery possible. However, also owing to this low yield, it was only sight deposits which grew in the past year (15.6% at June 2016), this growth having accelerated in comparison with that a year earlier. Meanwhile, time deposits continued to fall, although their rate of decline moderated from 17.3% at June 2015 to 14.6% at June 2016 (see Chart 2.18.B).

The loan-deposit ratio again decreased, as in previous years

As has been occurring in previous years, in the past year the decrease in lending and the recovery of deposits from households and non-financial corporations resulted in a decline in the loan-deposit ratio, continuing a marked downward trend initiated in 2007 (see Chart 2.18.C). A general analysis of certain liquidity risk indicators faced by Spanish institutions can be found in Box 2.3.

INTERNATIONAL EXPOSURE
Deposit institutions. June 2016

CHART 2.17

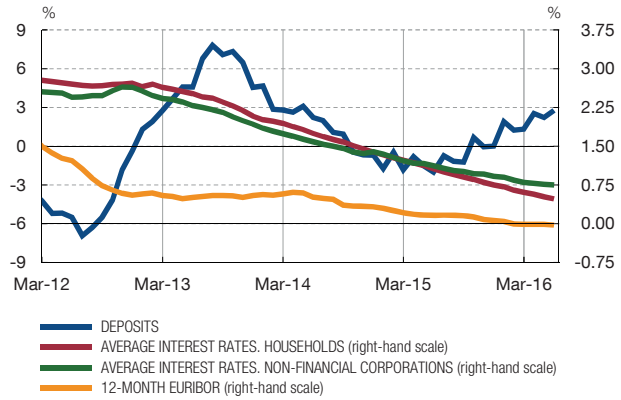


SOURCE: Banco de España.

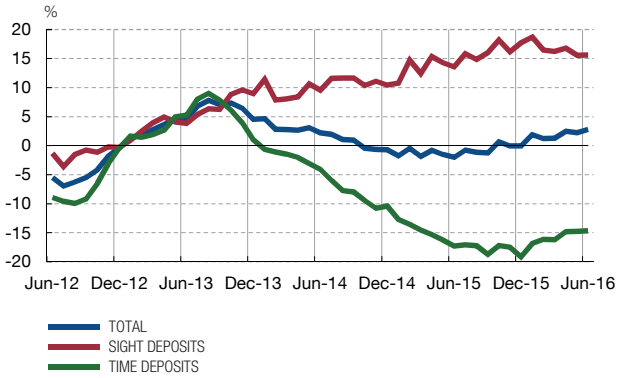
RETAIL FUNDING
Deposit institutions, ID

CHART 2.18

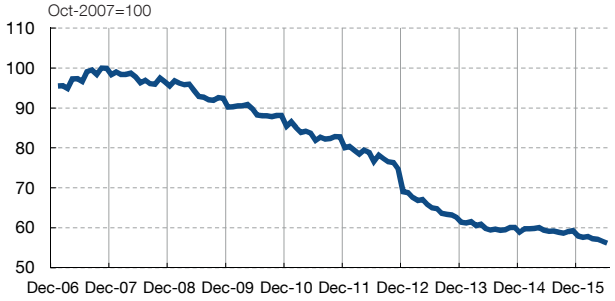
A DEPOSITS FROM HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS, AND AVERAGE INTEREST RATES



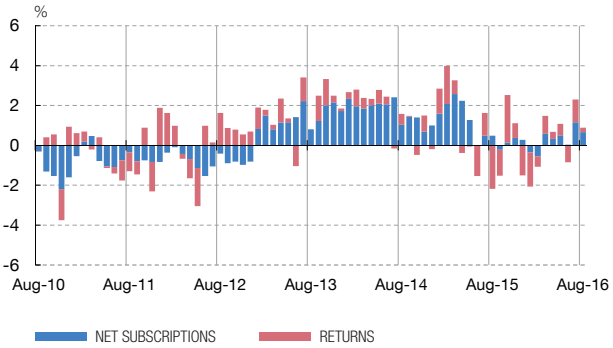
B DEPOSITS FROM HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS



C LOAN-TO-DEPOSIT RATIO IN RELATIVE TERMS (a)



D CONTRIBUTION OF RETURNS AND OF NET SUBSCRIPTIONS TO CHANGE IN NET ASSET VALUE OF INVESTMENT FUNDS



SOURCES: CNMV and Banco de España.

a Loans to households and non-financial corporations net of provisions. Deposits of households and non-financial corporations plus fixed-income securities of deposit institutions held by households and non-financial corporations.

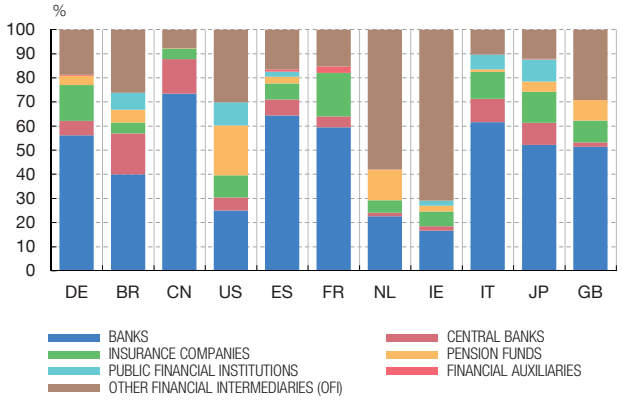
Meanwhile, the net assets of investment funds decreased at end-2015 and at the beginning of 2016 as a result of the negative yields reflecting the financial market instability at those dates. From March the net assets of investment funds began to grow due to both positive yields and to an increase in net subscriptions. This trend was cut short by the fall at June due to the negative yields brought by the Brexit. July saw a notable rise, while the latest available data, relating to August, point to continued growth in their net assets, albeit slight (see Chart 2.18.D). In all, from August 2015 to August 2016 the net assets of investment funds grew by nearly €7 billion, up 3.2%.

The percentage of shadow banking in Spain is nearly 5% of the total assets of financial institutions, no higher than in other advanced countries

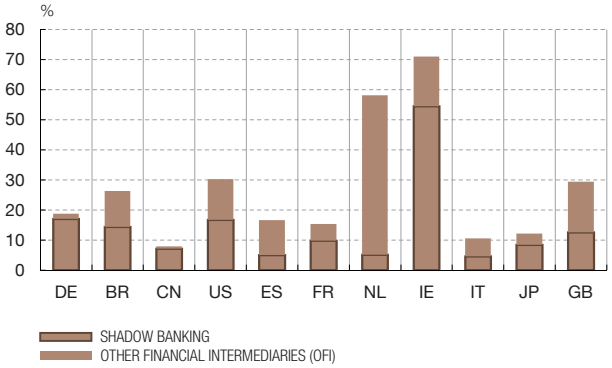
To isolate and measure the extent of shadow banking by financial intermediaries, the FSB has so far focused on the entities in the financial institutions sector which it defines as "other financial intermediaries" (OFIs) (see country comparison of the financial system structure in Chart 2.19.A), adjusting their value downward to exclude institutions not involved in credit intermediation and those whose activities do not generate risks of this type. Thus determined, the size of shadow banking in Spain comes to nearly 5% of the total assets of financial institutions. This figure is no higher than in other advanced countries (see Chart 2.19.B). This relative size suggests that these sources of alternative financing for the Spanish economy cannot have a very significant impact on the credit market in the short term, although there may be incipient developments which should be appropriately monitored.

SHADOW BANKING CHART 2.19

A FINANCIAL SYSTEM STRUCTURE
Percentage of total financial assets in financial sector (December 2014)



B SHADOW BANKING: CROSS-COUNTRY COMPARISON
Percentage of total financial assets in financial sector (December 2014)



SOURCES: FSB and Banco de España.

REPRESENTATIVE INDICATORS OF THE SYSTEMIC LIQUIDITY RISK OF SPANISH BANKS BOX 2.3

This Box analyses representative measures of the systemic liquidity risk of Spanish banks, defined as the tendency of financial institutions to underestimate, normally under favourable market conditions, the possibility that they will be unable to obtain funding on the markets at a reasonable price. On occasions this leads to liquidity "imbalances" which are corrected in a disorderly fashion. In these stressed conditions, not only is high-quality funding (capital, long-term debt) harder to obtain, but also the disposal of securities portfolios is hindered, which may feed back into heightened market stress.

This risk can be divided into two components. The first is funding liquidity risk (FLR), i.e. the risk of finding it difficult to make planned cash outflows (e.g. debt repayments) through recourse to new financing. To analyse this risk, the "liquidity" of bank balance sheets is examined from the standpoint of liabilities (type of funding and its cost) and of assets (liquid versus illiquid assets). The second component is market liquidity risk (MLR), i.e. the risk of being unable to sell a financial asset quickly without substantially affecting its price, and it is analysed using indicators such as the cost of operating in a financial centre or the volume traded per period in that centre.

In recent years the FLR of the main banking systems has tended to decrease, since bank funding sources have become more stable and their securities portfolios currently contain predominantly higher-

Chart A
LIQUIDITY OF BANKING LIABILITIES

Chart B
LIQUIDITY OF BANKING ASSETS (c)

SOURCE: Banco de España.

a Sum of ORS deposits and total equity over total assets.
b Interbank liabilities (including repos with other institutions) over total assets.
c Includes public debt, cash and central bank deposits over total assets.

Chart C
IBEX35 LIQUIDITY (a)

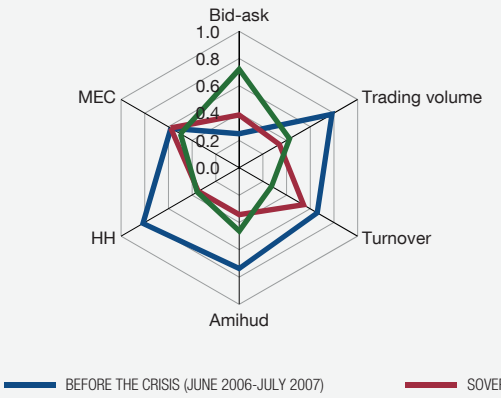
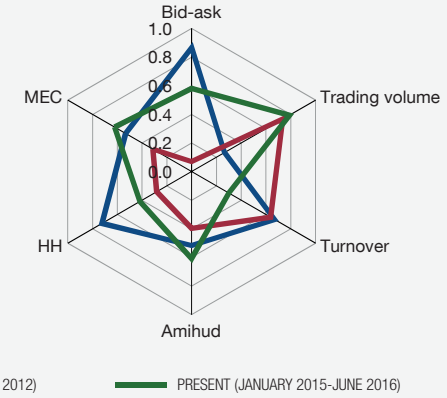


Chart D
GOVERNMENT DEBT LIQUIDITY (a)



SOURCES: Banco de España y Datastream.

a Standardised values between 0 and 1 for each indicator (using averages for each period). The closer the value is to 1, the greater the liquidity. Owing to the lack of data, the pre-crisis period begins in June 2006 in the case of the IBEX35 and in January 2005 in that of government debt. The indicators used are the following: *Bid-Ask:* difference between the highest price a buyer is prepared to pay for a security and the lowest at which a seller is prepared to sell (calculated for the whole of each market); trading volume: transactions in euro; turnover: trading volume relative to outstanding debt (government debt) or stock market capitalisation (IBEX35); Amihud: absolute return on trading volume; HH (Hui-Heubel): range of returns (maximum and minimum price of the latest sessions) relative to turnover ratio; and MEC (Market Efficiency Coefficient): variance of weekly returns relative to variance of daily returns multiplied by five (three-month sample windows).

quality assets which are more easily sold, such as government debt. This development reflects the rebalancing of assets and liabilities following the financial crisis and the influence of the new regulatory framework in which certain liquidity requirements, such as the LCR (liquidity coverage ratio) and the NSFR (net stable funding ratio), are in the process of being implemented. Where more doubts arise, however, is in the exposure of institutions to MLR. The concerns voiced by some organisations (IMF, Bank of England) over the apparent lack of liquidity of some secondary markets suggest that this risk may have increased recently.

The latter has implications for financial stability: if the MLR has increased because markets are less liquid, institutions will find it harder to convert securities into cash, even though their securities portfolios contain an increasingly larger proportion of highly liquid assets (government debt). In stressed situations, banks may incur losses on the sale of securities and their access to certain funding sources may be restricted through, for example, higher collateral requirements, which tend to aggravate market liquidity problems.

We present below Spanish bank metrics relating to the two risk components under analysis.

Following the financial crisis and, above all, the sovereign debt crisis, the liquidity position of Spanish institutions in terms of FLR improved significantly, in much the same way as noted above for the main banking systems. Thus the proportion of stable liabilities on bank balance sheets has improved notably due, among other things, to a higher weight of ORS (other resident sector) deposits and of equity and a lower dependence on interbank financing (see Chart A). Also, it should be recalled that since the sovereign tensions eased, the cost of raising other funds on the market through instruments such as covered bonds or senior or subordinated securities has fallen sharply, providing an incentive to lengthen the maturities of new issues (lower risk of mismatch between assets and liabilities and therefore greater liquidity). As regards assets, the higher sovereign debt holdings in bank securities portfolios, in principle the most liquid on the market, would represent an improvement in liquidity (see Chart B). At present, these securities account for around 71% of the debt securities held by the Spanish banking system, compared with 38% in 2007.

The behaviour of FLR must, as noted above, be compared with that of the MLR to which Spanish banks are exposed. This risk is the subject of much debate in international circles because there have been numerous changes in financial market participants (lower dealer activity, higher weight of electronic platforms in debt security markets and increased trading through computer algorithms, greater presence of held-to-maturity investors, etc.) which may alter market liquidity, while at the same time there have been several atypical one-off movements in market trading. However, this concept is difficult to measure because it is approximated by means of various indicators which do not always send the same signal. As an illustration, we analyse below the liquidity indicators of the two securities representing the bulk of Spanish institutions' domestic portfolio: Treasury debt and the IBEX 35. These measures capture desirable market liquidity characteristics: 1) low transaction costs (bid-ask spread), 2) high trading activity (volume traded, turnover ratio), 3) ability to absorb orders placed on the markets without sharp price movements (Amihud and HH ratios), and 4) efficient price formation (MEC measure). Charts C and D compare these indicators in three periods (before the financial crisis, during the crisis and the present).

According to these measures, the metric showing a clear improvement in liquidity with respect to the pre-crisis period is that of transaction costs (in the case of the IBEX 35). In the other indicators, there are some signs of deterioration. Thus, trading activity, defined as the volume of securities traded in a period, exceeds the pre-crisis level in Treasury debt but not in the IBEX 35; however, when this measure is divided by the size of each market (turnover ratios), liquidity declines in all centres. Market capacity to absorb orders (Amihud and HH ratios) worsens substantially in the IBEX 35, while in the case of Treasury debt, the signs are not so clear, although a certain deterioration is noticeable. Finally, the MEC measure does not change significantly in the two periods.

To conclude, an improvement in the funding profile of Spanish institutions is discernible, which, accompanied by a larger buffer of liquid assets, reduces exposure to FLR. However, in the exposure to systemic liquidity risk, which encompasses FLR and MLF, some deterioration is apparent, albeit not for all indicators. Since, furthermore, these indicators do not contribute to the same extent, the analysis must be carried out with caution and a firm conclusion cannot be reached regarding systemic liquidity risk.

2.2 Profitability

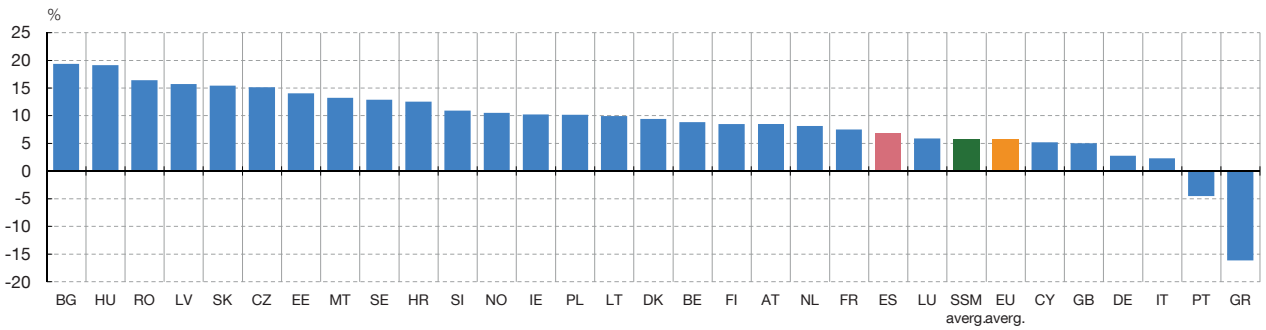
In the first half of 2016 Spanish institutions recorded consolidated income of €7.6 billion, nearly 30% lower than in the same period of the previous year

In the first six months of 2016, the consolidated income attributable to the controlling company posted by the aggregate of Spanish deposit institutions exceeded €7.6 billion, nearly 30% less than in the same period of 2015 (see Annex 2). This decrease meant that the return on assets (ROA) after tax of total Spanish deposit institutions fell by 17 basis points (bp) in the past year, from 0.59% at June 2015 to 0.42% at June 2016. In the same line, the return on equity (ROE) after tax also dropped, this time by more than 2.5 pp, from 8.8% in the previous year to 6.1% in the current year, slightly above the European average and the average of the SSM countries (on EBA data at June 2016,[10] see Chart 2.20).

Net interest income and gains on financial transactions reduced consolidated income, while provisions improved it

Chart 2.21.A sets out the contribution of the main income statement items to consolidated income, measured in terms of average total assets (ATAs), and the change from one year to the next, which resulted in a decrease of 17 bp in ROA. The only item which improved from June 2015 to June 2016 was impairment losses on financial assets, which continued its downward trend uninterrupted since end-2012 (see Chart 2.21.B). The contribution of commissions and operating expenses, measured in ATA terms, held steady in the past year. By contrast, net interest income, gains on financial transactions (including exchange differences) and the other items made a smaller contribution to the final profit posted at June 2016.

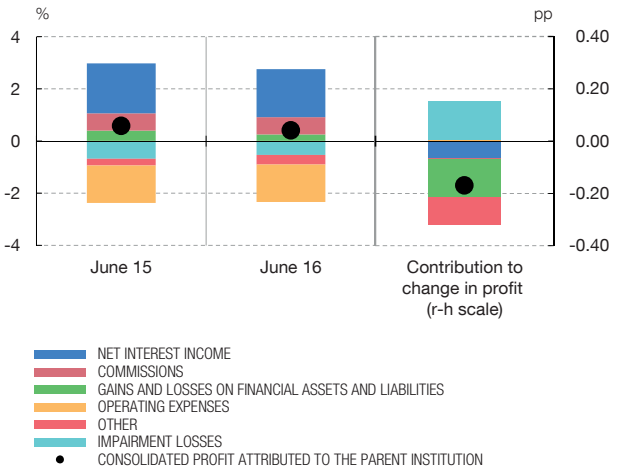
ROE. EUROPEAN COMPARISON. JUNE 2016 CHART 2.20



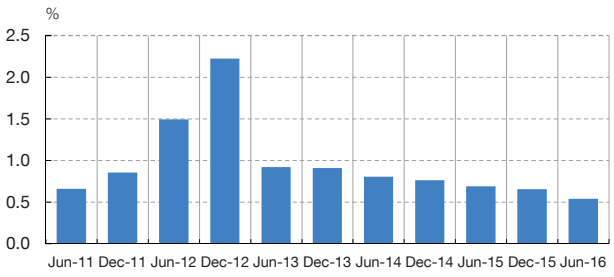
SOURCE: EBA.

10 The data refer to a sample of 198 banks and are available at: http://www.eba.europa.eu/riskanalysis-and-data/risk-dashboard

A CONTRIBUTION OF THE COMPONENTS TO THE CHANGE IN JUNE 2016 CONSOLIDATED PROFIT ATTRIBUTED TO THE PARENT INSTITUTION AS A % OF ATA



B FINANCIAL ASSET IMPAIRMENT LOSSES AS A % of ATA



SOURCE: Banco de España.

Most of the fall (nearly 37% year-on-year, see Annex 2) in gains on financial transactions was caused by developments in exchange differences, due largely to the depreciation of sterling throughout the first half of 2016, derived from the uncertainty over the UK referendum. As noted above (see Chart 2.2.A), the UK market is that to which Spanish institutions are most highly exposed.

Financial costs did not decrease enough to offset the drop in financial revenue, so net interest income fell

At the top of the income statement, the items which best reflect the pure banking business, i.e. financial revenue and financial costs, fell in the same proportion, by 3.2% year-on-year in the past year, giving rise to a fall in net interest income also of 3.2%. In previous periods, net interest income had not decreased because the financial costs fell by more than financial revenue. However, as remarked in previous FSRs, there is less and less scope to continue cutting financial costs.

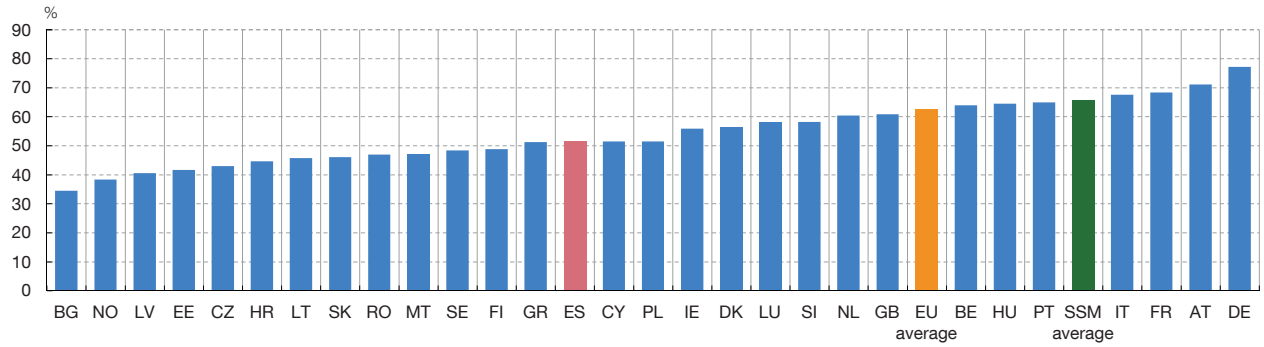
The euro area's expansionary monetary policy has taken market interest rates to low, and in some cases negative, levels. The persistence of a low interest rate scenario puts pressure on net interest income, although it also helps to alleviate the financial burden of borrowers, particularly in countries like Spain where the relative weight of variable-rate loans is high. Against this background, it is relevant to reflect on the situation in the European banking systems and look at the characteristics determining the state of their income statements.

The efficiency of the Spanish banking system exceeds that of the main European countries and is higher than the European average

For example, it is relevant to examine, in terms of efficiency, how income is generated by the various banking systems. In other words, we wish to know how much it costs institutions to obtain their income. The more efficient institutions are using their resources to generate income, the more they are able to regenerate any income eroded by situations such as the current very low interest rate scenario. Chart 2.22 shows how the Spanish banking system is more efficient (lower efficiency ratio) than the main European countries and than the European average. That is to say, the cost incurred by Spanish banks in terms of income obtained is among the lowest in the main European banking systems. Therefore, an alternative for coping with a situation of continually narrowing margins is to keep working to make banking operations as efficient as possible.

EFFICIENCY RATIO (a). EUROPEAN COMPARISON. JUNE 2016

CHART 2.22



SOURCE: EBA.

a The cost-to-income ratio is defined as operating expenses divided by gross income.

Bank profits in Spain are moving in line with those at consolidated overall level…

On individual financial statement data, the profitability of Spanish banks in their business in Spain in the first half of 2016 behaved similarly to that of consolidated activity overall, although the bottom line was somewhat less negative. Thus income before tax decreased by only 3.5% with respect to June last year, resulting in ROE of 5.7%. The main reason for this smaller decrease in income is the significant fall in impairment losses on financial assets, which were down by more than 40% in the past year, compared with 21% at consolidated level.

…although net interest income fell more sharply in business in Spain

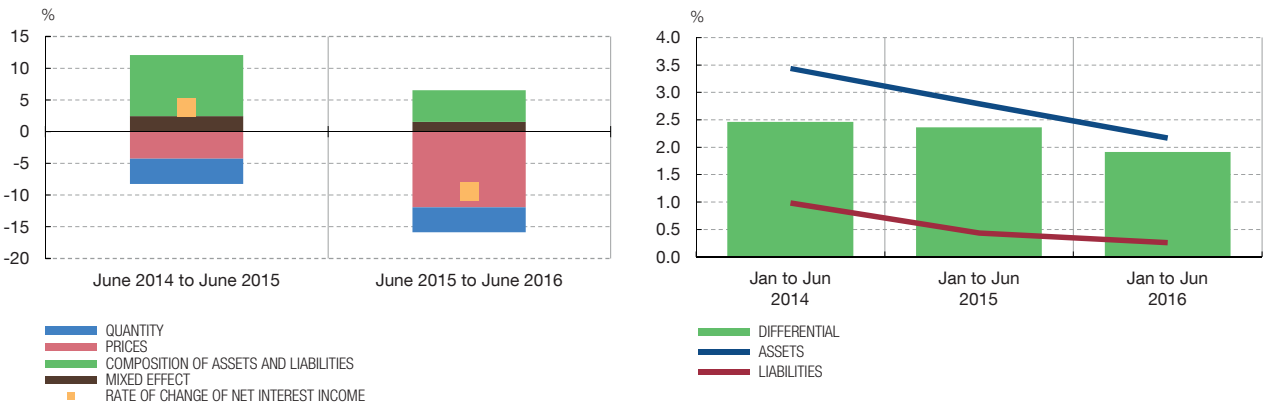
By contrast, net interest income in business in Spain fell more sharply than at overall consolidated level. Between June 2015 and June 2016 net interest income decreased by 9.4%. Chart 2.23.A shows the percentage of this decrease explained by each element. The effect of the interest rates applied to interest-earning assets and interest-bearing liabilities (price effect, determined by the very low lending interest rates and the scant room for further falls in deposit interest rates) is what explains most of the decrease in net interest income in the first half of 2016. In the previous year this impact was also negative, but less marked than in the current year. In the first half of 2016, the marginal rates on new loans fell by more than the marginal rates on new deposits, which, given their current level, have little room left to continue decreasing (see Chart 2.23.B).

PROFITABILITY
Business in Spain, ID

CHART 2.23

A PERCENTAGE OF THE CHANGE IN NET INTEREST INCOME EXPLAINED BY EACH FACTOR

B MARGINAL INTEREST RATES ON ASSETS AND LIABILITIES (a)



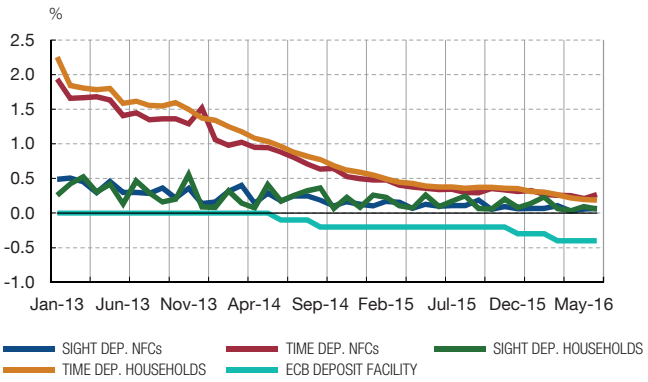
SOURCE: Banco de España.

a Marginal interest rates refer to those established in transactions initiated or renewed in the previous reference month. The transactions are weighted according to their volume. The asset-side weighted marginal interest rates include, among others, those applied to financing for house purchase, consumption and credit to non-financial corporations, while on the liabilities side they include fixed-term deposits and repos, among others.

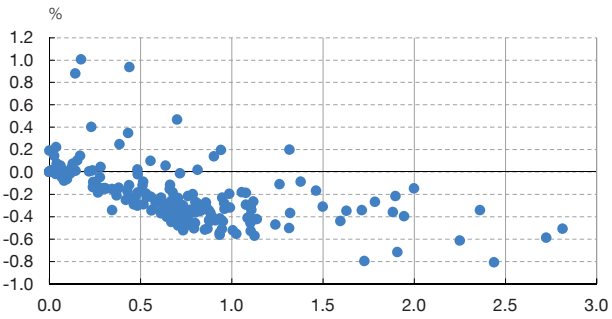
PROFITABILITY
Business in Spain, ID

CHART 2.24

A ECB DEPOSIT FACILITY AND INTEREST RATES ON NEW DEPOSIT OPERATIONS



B RELATIONSHIP BETWEEN THE CHANGE IN THE AVERAGE COST OF LIABILITIES BETWEEN JUNE 2015 AND JUNE 2016 (y-axis) AND THEIR AVERAGE COST IN JUNE 2015 (x-axis)



SOURCE: Banco de España.

The impact of activity on net interest income (quantity effect) was also negative in the first half of 2016 and its magnitude was very similar to that of the previous year, a sign that banking activity is not rallying (as described above, the total volume of lending continues to decrease, Chart 2.6.A). Finally, the contribution of changes in the asset and liability mix (structural effect) although it continues to be positive, is notably weaker than in the previous year and insufficient to offset the aforementioned negative impacts.

There is progressively less room for manoeuvre to address the cost of liabilities

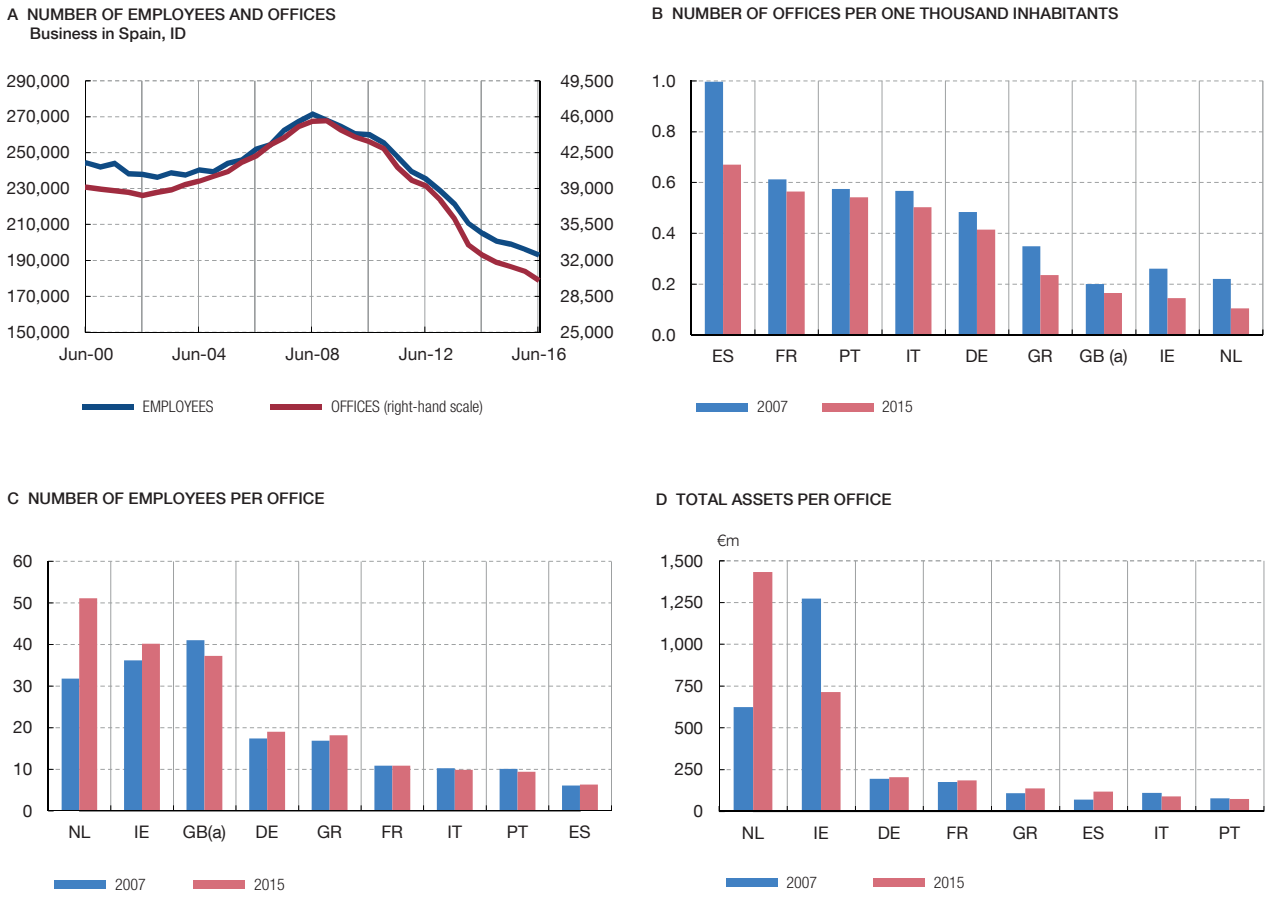
As noted above, on the liabilities side there is not much room left for further cuts, given the low level of interest rates on new sight and time deposits from households and non-financial corporations (see Chart 2.24.A). Along these same lines, Chart 2.24.B shows that the largest falls in the average cost of liabilities between June 2015 and June 2016 were at institutions whose average cost at June 2015 was higher. In other words, the institutions with a very low cost of liabilities have little room for manoeuvre to continue reducing their funding costs.

Only the significant decrease in asset impairment provisions improved the performance of business in Spain

In business in Spain, the income from financial transactions also decreased notably in the first half of 2016. This decrease was offset by the rise in dividend income, so the fall in gross income (8.8%) was similar to that in net interest income. Meanwhile, operating expenses increased very slightly, which, along with the fall in gross income, reduced net operating income, and only the aforementioned sharp decrease in asset impairment provisions improved the net income of business in Spain.

As regards operating expenses, in line with the aforementioned comments on the efficiency ratio, the process of capacity adjustment continued through the reduction of staff and offices (see Chart 2.25.A). If the adjustment made by the Spanish banking system is compared with that of the main European countries, it can be seen that at December 2015 Spain remained the system with the most offices per inhabitant, although the gap with other countries has decreased significantly since the onset of the financial crisis (see Chart 2.25.B). As for average office size, Spain stands out as having the smallest offices, coming last among the countries analysed in terms of staff per office, and it is also among the countries with the lowest volume of assets per office, although this latter indicator has increased in recent years (see Charts 2.25.C and 2.25.D). Looking forward, technological investment will be another challenge which institutions will have to address and which will unquestionably have a significant impact on their income statements.

EMPLOYEES AND OFFICES. EUROPEAN COMPARISON CHART 2.25



SOURCES: Banco de España, ECB and Eurostat.

a Data refer to December 2014.

In short, the profitability of the Spanish banking sector and of the other euro area countries is subject to pressure from various sources

In summary, the profitability of the Spanish banking sector continues to be subject to pressure from various sources, such as a business volume which continues to fall in Spain, a decreasing but still high level of non-performing loans, and a low interest rate environment. The low interest rates reduce bank profitability not only in Spain but also in the rest of Europe. Against this background, there are certain factors which banks have to continue strengthening as an alternative form of restoring some of their eroded income. One of these is operational efficiency, i.e. incurring the lowest possible costs in the conduct of business. In general, institutions have to continue searching for ways to adapt their business model to the environment, striving not only to gain efficiency, but also searching for alternative sources of income and how to provide supplementary services and even exploring possible corporate operations, since usually by their very nature bring efficiency gains in the medium term.

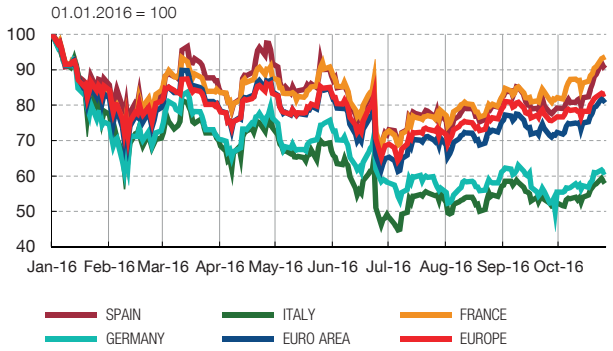
The stock market prices of European banks have continued to trend downwards this year

This pressure on bank profits is one of the factors affecting the stock market performance of banks. So far this year, their stock market performance has generally trended downwards. The beginning of the year saw an initial correction of bank share prices, which recovered from mid-February. In June, particularly towards the end of the month, there was a marked drop in share prices, which was accentuated by the negative result of the referendum on whether the United Kingdom should remain in the EU (the falls in the banking sector indices of the main European countries were between 13% and 22% on Friday 24 June, the day after the referendum). From these lows, share prices have been progressively recovering. Chart 2.26.A shows that the performance of the Spanish banking sector during

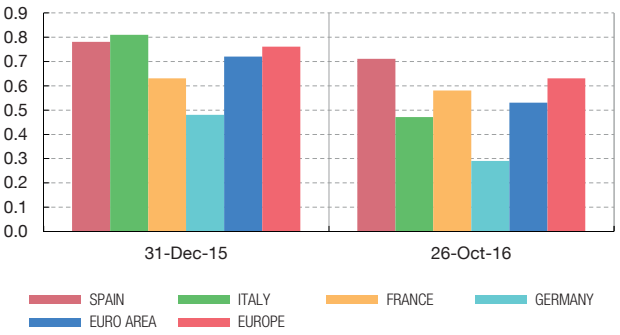
MARKET INFORMATION
European comparison

CHART 2.26

A BANKING STOCK MARKET INDICES



B PRICE-TO-BOOK-VALUE RATIO OF THE BANKING SECTOR



SOURCE: Datastream.

the year has been comparatively better than that of the other European countries, standing at the level of France and above the European and euro area averages, the price correction nevertheless being around 10% since the start of the year.

The share price slump gave rise to a widespread drop in the price-to-book value of European banks (see Chart 2.26.B). However, the decrease was not so pronounced for the Spanish banking sector, so the behaviour of this metric allowed it to maintain its notable position relative to the main European banking systems, despite a value clearly below unity.

The stock market performance of banks is important because low share prices make it harder for them to increase capital to strengthen their solvency levels. This is analysed in the next section.

2.3 Solvency

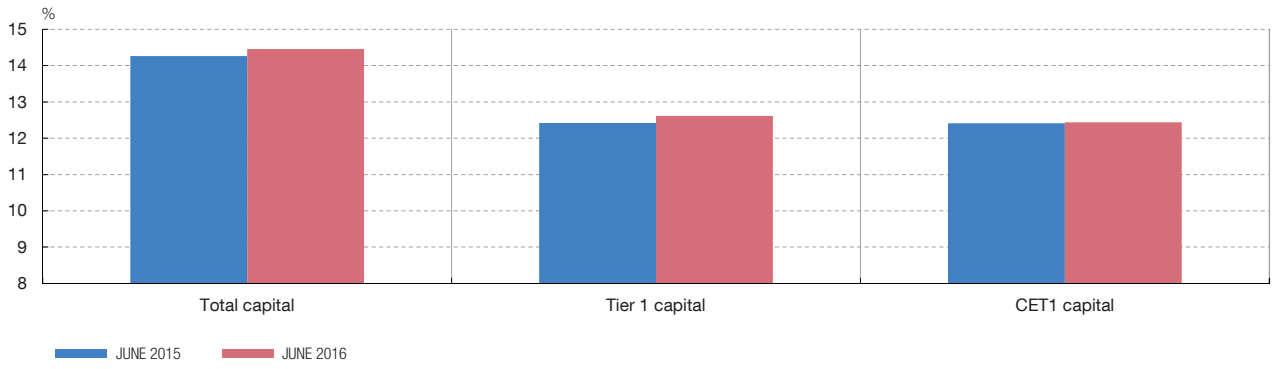
The CET1 ratio held steady at 12.4% in the past year

In June 2016 the ratio of highest-quality capital, i.e. common equity tier 1 (CET1) stood at 12.4% for total Spanish deposit institutions. The ratio, scarcely differing from June 2015 (see Chart 2.27), amply exceeded the regulatory requirement.[11]

Both the total capital ratio and the tier 1 capital ratio increased by nearly 20 bp between June 2015 and June 2016. Thus the total capital ratio reached 14.4% at June 2015 and the

CAPITAL RATIOS
Deposit institutions

CHART 2.27

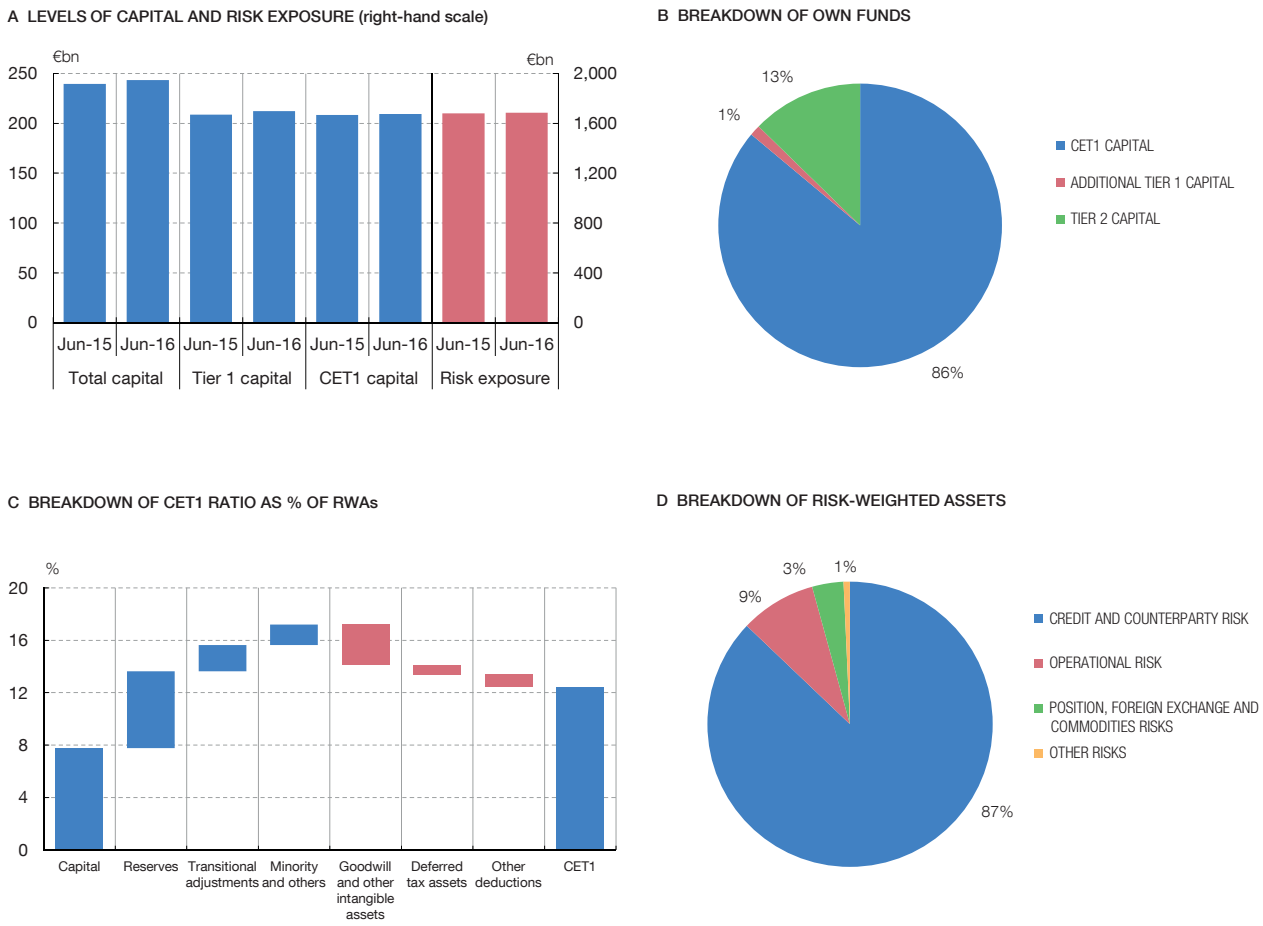


SOURCE: Banco de España.

11 The progressive application (phase-in) of the capital conservation buffer, which in 2016 raises by 0.625% the CET1 minimum requirement of 4.5%, commences on 1 January 2016.

BREAKDOWN OF OWN FUNDS AND RISK-WEIGHTED ASSETS
Deposit institutions. June 2016

CHART 2.28



SOURCE: Banco de España.

tier 1 capital ratio was 12.6%, slightly above the CET1 ratio due to the effect of gradual transitional adjustments, particularly in relation to deductions.[12]

CET1 makes up most of the own funds of Spanish banks

As regards the composition of own funds, these consist mainly of common equity tier 1 capital, which accounts for 86% (see Chart 2.28.B), while the rest comes mostly from tier 2 capital, although additional tier 1 capital has increased in the past year.

Chart 2.28.C breaks down common equity tier 1 capital in terms of risk-weighted assets. It shows, as regards eligible capital, that equity instruments are the main component (45%), followed in quantitative importance by reserves (34%). Thus these two items together account for practically 80% of CET1, which is completed by transitional adjustments (12%) and minority interests and other (9%). For their part, nearly two-thirds of deductions arise from goodwill and other intangible assets, while those derived from deferred tax assets represent 16% and other deductions account for 19%.

Risk-weighted assets remained relatively stable in the past year

As regards the denominator of the capital ratios, risk-weighted assets (RWAs) exceeded €1,683 billion at June 2016, having remained relatively steady throughout the past year (up by 0.2%, see Chart 2.28.A). Given that the total assets of deposit institutions also held relatively

12 The ratios take into account the transitional adjustments designed to facilitate the progressive implementation of Basel III. The implementation timetable establishes generally in 2016 that 60% of the amounts of deductions will be deducted from common equity, while the remaining 40% will be deducted from additional tier 1 capital.

steady in the past year (up slightly by 0.4%), RWAs as a percentage of total assets barely changed from June 2015 to June 2016, standing at 45.8%. Also, the composition of RWAs remained unchanged during the past year. Credit and counterparty risk[13] constitute the vast bulk of RWAs (87%), followed by operational risk (9%), while position, foreign exchange and commodity and other risks account for less than 5% of RWAs (see Chart 2.28.D).

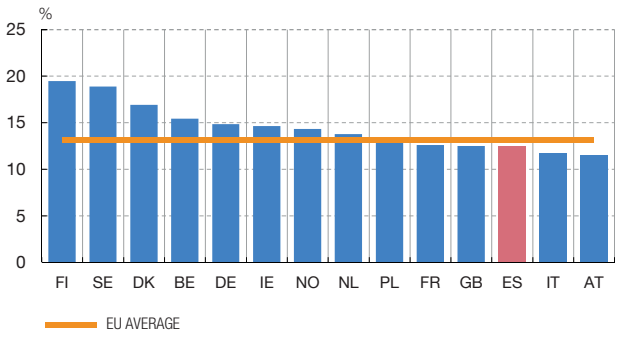
The CET1 ratio of the Spanish banking sector is low with respect to the other European countries…

In July this year the EBA published the results of its stress test (for a summary of these results, see Box 2.4) and, as in previous FSRs, this allows us to compare the solvency of the banking systems of the various European countries (represented by a small number of banks per country with a substantial relative weight). On December 2015 data, the CET1 ratio (including transitional adjustments) of Spanish banks was low with respect to the European countries, and around 70 bp below the European average (see Chart 2.29.A). Chart 2.29.B shows how the CET1 ratio changed between the stress test conducted by the EBA in 2014 (data as at December 2013) and the exercise last July (data as at December 2015), and gives the contribution to that change from each of the components of the ratio, i.e. CET1 capital and RWAs. It shows that the CET1 ratio increased for practically all European countries, driven by an increase in CET1 capital and, in most countries, also by a decrease in the volume of RWAs (since it is in the denominator of the ratio, when RWAs

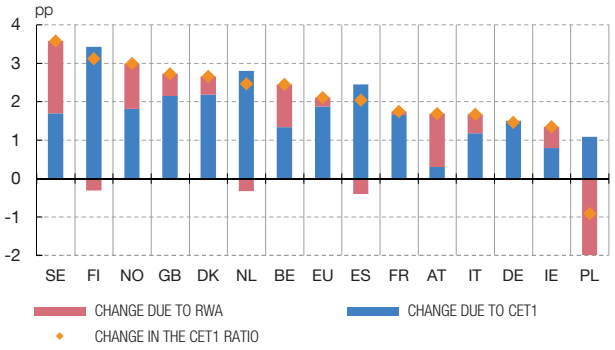
SOLVENCY MEASURES. EUROPEAN COMPARISON

CHART 2.29

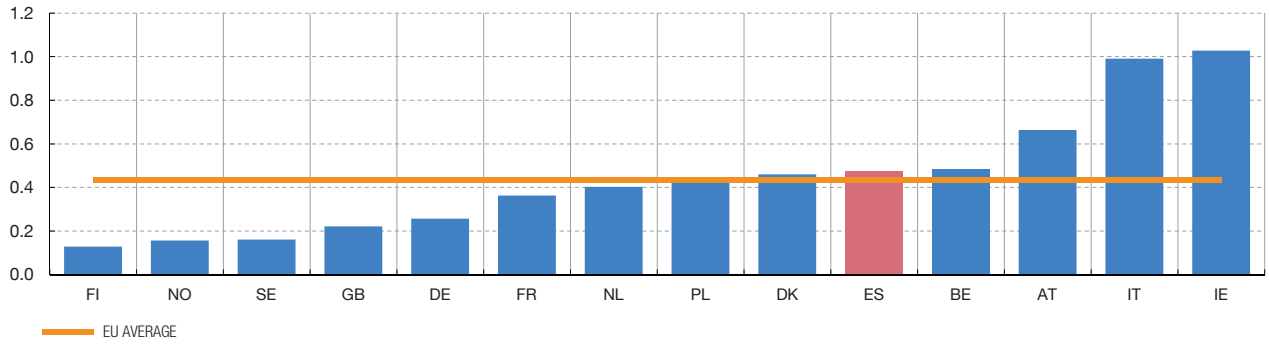
A CET1 RATIO. DECEMBER 2015



B PERCENTAGE POINTS CHANGE IN CET1 RATIO BETWEEN DECEMBER 2013 AND DECEMBER 2015 (a)



C TEXAS RATIO PROXY. DECEMBER 2015 (b)



SOURCE: European Banking Authority.

a The comparison is made for institutions that participated in the 2016 stress test (except from Hungary), taking the data for these same institutions in the 2014 stress test, and clustering by country. The orange diamond shows, for each country, the total change in the CET1 ratio from December 2013 to December 2015. The blue and dark red bars show the portion of this change attributable to changes in CET1 capital and in RWAs, respectively. Positive bars denote an inter-period increase in CET1 capital and an inter-period reduction in RWAs, changes that would result in an increase in the CET1 ratio.
b The ratio is calculated by dividing the value of NPL by the sum of capital (including instruments of capital eligible as CET1 and reserves) and provisions.

13 This risk comprises that from credit exposures, equity exposures and securitisation positions, and includes both that calculated using RWAs obtained by the standardised method and that obtained by the IRB method.

decrease the CET1 ratio rises). The growth of the CET1 ratio for Spain was very similar to the European average, around 2 pp, and is explained by an increase in CET1 capital which offsets the increase in the volume of RWAs. In other countries (Sweden, Norway, Belgium, Austria and Italy), the increase in the capital ratio was driven substantially by a fall in RWAs.

…while the Texas ratio stood at an intermediate level

Chart 2.29.C sets out the Texas ratio, another measure of institutions' solvency which shows, in particular, how the problem assets of institutions may affect their solvency. To calculate this ratio, which is based on stress test data, non-performing loans are divided by the sum of capital (including eligible equity instruments like CET1 and reserves) and provisions.[14] This metric shows that the Spanish banking system stands in an intermediate position with respect to the other European countries and, although slightly above the European average, it is a good distance away from the countries whose ratios are near to unity (Texas ratios above unity indicate problematic situations because non-productive assets are not fully covered).

14 Since foreclosed asset data are not available for each country, only non-performing loans are included in the numerator, along with the related provisions in the denominator.

ANALYSIS OF THE RESULTS OF THE 2016 EBA STRESS TEST

BOX 2.4

The 2016 EBA stress test (ST), the results of which were published on 29 July this year, encompassed 51 banks from 15 countries of the EU and the European Economic Area (37 banks from SSM countries and 14 banks from Denmark, Hungary, Norway, Poland, Sweden and the UK). Of them, six are Spanish (representing around 80% of the total assets of the Spanish banking sector), making Spain the country with the third highest number of institutions in the exercise, after Germany and France.

Chart A
GDP GROWTH RATE FOR SPAIN AND EU, BASELINE SCENARIO

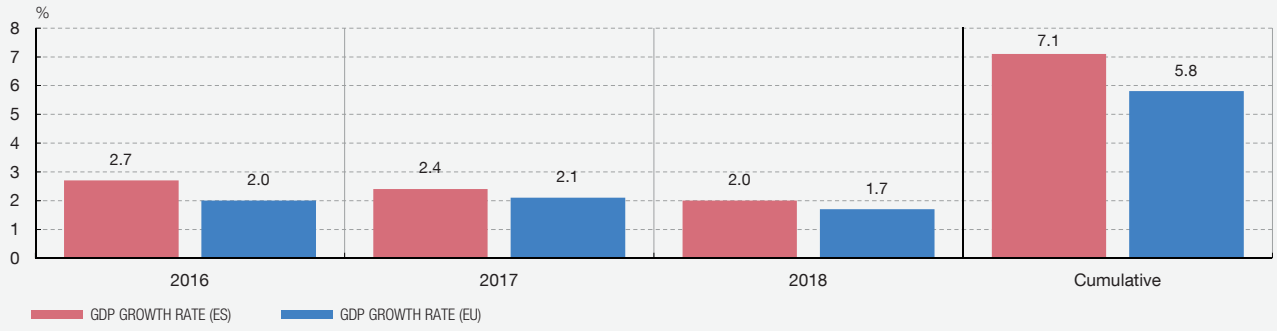
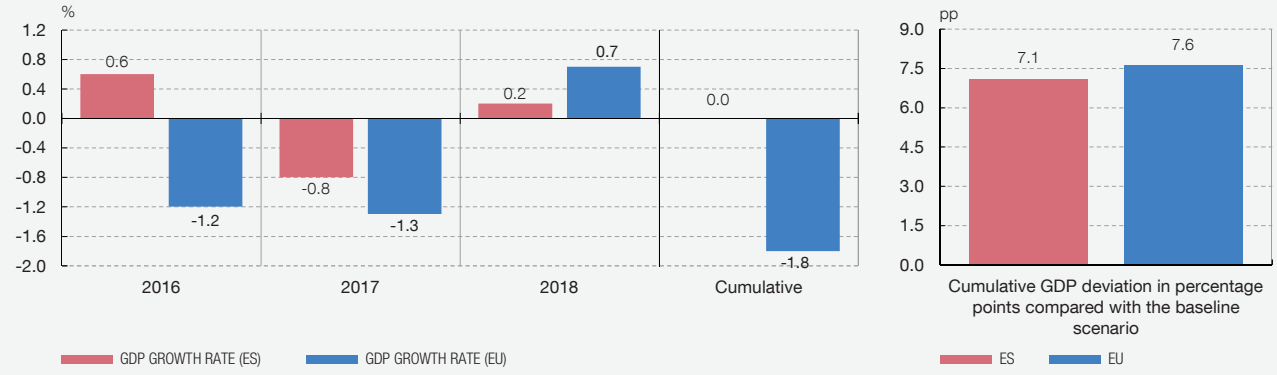


Chart B
GDP GROWTH RATE FOR SPAIN AND EU, ADVERSE SCENARIO



SOURCE: EBA.

To obtain the results, a single methodology and scenarios applicable to all institutions were defined to ensure homogeneity and comparability among institutions. Each bank conducts its own stress test, according to the common methodology published by the EBA but using its own models, in what is known as a bottom-up ST. These methods allow a calculation of how capital is impacted by credit risk, market risk, net interest income, operational risk and other income.

The objective of the stress test organised by the EBA was to provide supervisors, banks and other market participants with solvency measures comparable across institutions in adverse economic situations.

The stress test is based on estimating the impact of shocks with a time horizon of three years. On this occasion, as in the 2014 exercise, the estimation relies on a "static balance sheet" assumption, i.e. the balance sheet data used and set for the three years of the stress test time horizon were those as at December 2015. Recapitalisation processes carried out in 2016 were not taken into account.

The exercise considered two scenarios, baseline and adverse, both with a three-year time horizon (2016-2018). These scenarios include the expected changes in the main macroeconomic variables identified. One of the most important is GDP, for which a cumulative increase of 5.8% in the EU in the three-year time horizon under the baseline scenario is expected, while under the adverse scenario a cumulative fall of 1.8% is estimated. In the case of Spain, the cumulative change in GDP under the baseline scenario is 7.1%, while under the adverse scenario a cumulative change of 0% was assumed. Chart A depicts the changes in GDP under the baseline scenario and the cumulative change in the three years, for Spain and the EU.

Although the rate of change is more favourable for Spain than for the EU on average when they are compared with each other, the severity of the scenario is similar. This is due to the levels set for the baseline scenario, such that if the difference in GDP growth between the adverse scenario and the baseline scenario for Spain and the EU average is compared, those differences are fairly similar. Chart B shows the changes in the adverse scenario and the difference in cumulative GDP in the three years in pp from the baseline scenario, which is very similar in Spain (7.1 pp) and the EU (7.6 pp).

It should be remembered that the adverse scenario represents an extreme macroeconomic situation with a low likelihood of occurrence which seeks to identify weaknesses in the banking system if a set of plausible but very unlikely systemic risks materialises.

The 2016 EBA stress test shows the transitional ratio of CET1 capital to risk-weighted assets (RWAs). At aggregate level, the

Chart C
CET1 RATIO. IMPACT OF THE BASELINE SCENARIO ON ALL INSTITUTIONS ANALYSED (a)

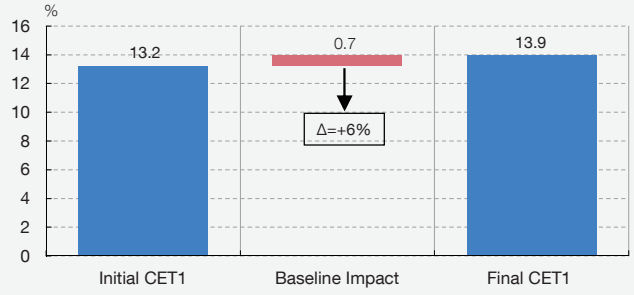


Chart D
CET1 RATIO. IMPACT OF THE BASELINE SCENARIO ON ALL SPANISH INSTITUTIONS (a)

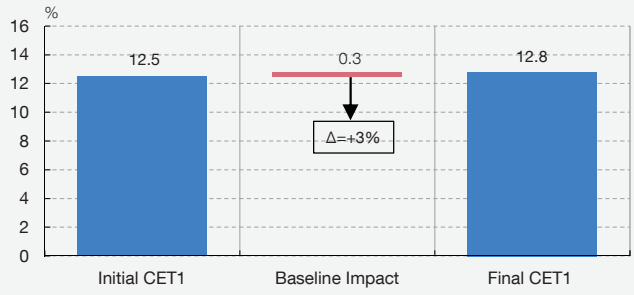


Chart E
CET1 RATIO. IMPACT OF THE ADVERSE SCENARIO ON ALL INSTITUTIONS ANALYSED (a)

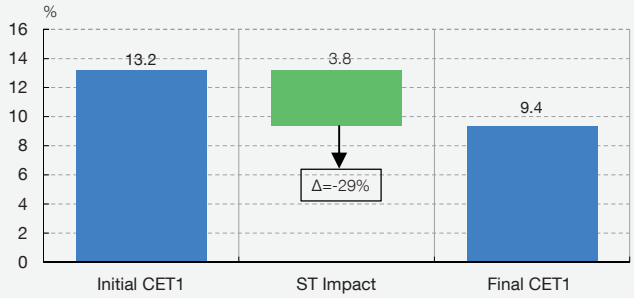
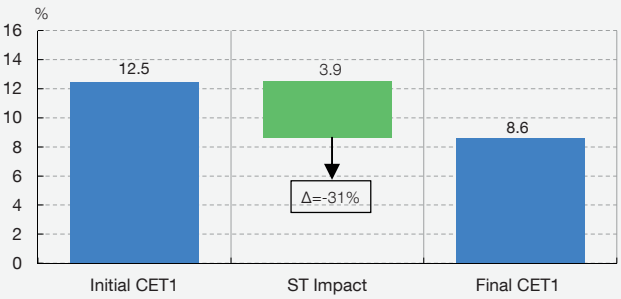


Chart F
CET1 RATIO. IMPACT OF THE ADVERSE SCENARIO ON ALL SPANISH INSTITUTIONS (a)



SOURCE: EBA.

a The Δ symbol represents percentage change in the CET1 ratio.

starting point of this CET1 ratio for total institutions is 13.2%. In the case of Spain, the initial level of this ratio is 12.5%.

Chart C compares the starting value of the ratio (December 2015) with the estimated ratio under the baseline scenario for 2018 for total institutions. It shows that the ratio increases by 0.7 pp from 13.2% to 13.9% (up 6%). In the case of Spain the ratio rises by 0.3 pp from 12.5% to 12.8%, as shown in Chart D, an increase of 3%. It can thus be said that, under the baseline scenario, with notable economic growth sustained over time, the capital ratio of Spanish banks improves significantly.

Chart E compares the starting value of the ratio (December 2015) with the estimated ratio under the adverse scenario for 2018 for total institutions. It shows that the ratio decreases by 3.8 pp from 13.2% to 9.4% (down 29%). In the case of Spain the ratio decreases by 3.9 pp from 12.5% to 8.6%, which, as seen in Chart F, represents a decline of 31%.

Chart G shows the change in pp by country between the current value of the CET1 ratio and its estimated value under the adverse scenario for 2018. It indicates that, as mentioned above, the estimated change for total institutions is 3.8 pp, very similar to that in Spain where the change is 3.9 pp. The most notable cases are those of Ireland, with a decrease of 7.1 pp, and Norway where, by contrast, the CET1 ratio under the adverse scenario for 2018 is equal to that in 2015 and the change is thus 0 pp.[1]

Chart H compares the results of the 2016 exercise with those obtained in 2014, analysing the values of the aggregate CET1 ratio in each country.[2] Specifically, it shows the impact on CET1 under the adverse scenario in the 2014 exercise and the 2016 exercise for each country. In all cases except Belgium, the capital ratio decreases more in the 2016 exercise. Particularly notable is the difference between the exercises in Spain (1.4 pp in 2014 against 3.9 pp in 2016)[3] and the Netherlands (2.5 pp in 2014 versus 4.8 pp in 2016).

The results of the EBA stress test for Spain show that the institutions included in the exercise, which represent 80% of the Spanish banking system, have a high resilience to the adverse scenario.

1 It should be taken into account that only one Norwegian institution was included in the EBA stress test.
2 In making the comparison, the institutions included in each country are only those present in the two stress tests (51 institutions).
3 Part of this difference is due to the impact of transitional adjustments and the application of prudential filters (sovereign risk), specifically to their progressive elimination in capital deductions. The inclusion of operational risk also contributes to explaining this difference.

Chart G
REDUCTION IN PERCENTAGE POINTS IN CET1
(real 2015 data vs adverse scenario result for 2018)

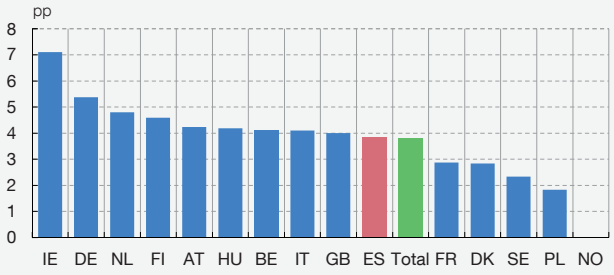
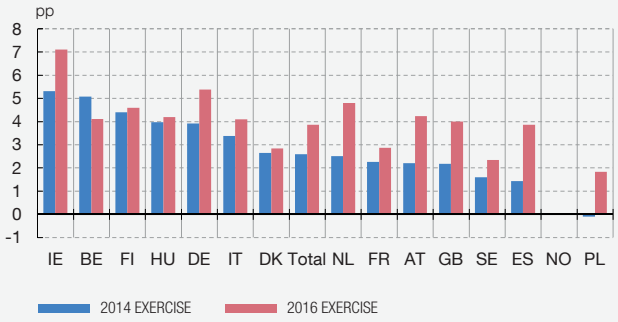


Chart H
REDUCTION IN CET1 RATIO UNDER THE ADVSERSE SCENARIO (a)



SOURCE: EBA.

a The chart shows the percentage points change in the CET1 ratio under the adverse scenario of the 2014 and 2016 EBA stress tests.

2.4 Forward-looking assessment of the Spanish banking system's resilience to adverse macroeconomic scenarios

In recent years the BdE has worked to improve its internal tool used to prospectively analyse the solvency and measure the resilience of Spanish institutions under different macroeconomic scenarios. This BdE analysis exercise is in line with others conducted internationally, for example the US Comprehensive Capital Analysis and Review (CCAR) or the European stress tests conducted by the EBA.

The Banco de España conducts forward-looking...

The methodology developed by the BdE is based on a macroprudential tool which is highly granular due to the type of data used and employs homogeneous assumptions defined by the regulator (top-down approach). This analysis framework, which receives the

...analyses of the solvency of Spanish institutions (FLESB)…

name of FLESB (Forward Looking Exercise on Spanish Banks),[15] has been used by the BdE every year since its roll-out to analyse the resilience of Spanish institutions. In each exercise efforts have been made to improve its stress test methodology, in terms of both the data used and the main calculation methods employed.

…to examine, under different macroeconomic scenarios, their capacity to absorb expected credit losses

The FLESB tool uses macroeconomic scenarios that have to be stringent but plausible to calculate expected credit losses over a specific time horizon.[16] This impairment of exposures is then compared with the loss-absorbing items, such as existing provisions, estimated profit before provisions for the analysis time horizon and the excess capital available.

The top-down methodology used differs from the bottom-up methodology used by the EBA

The methodology underlying these assessment processes differs depending on whether they are bottom-up exercises, such as those of the EBA, which are subsequently subject to quality control by the European Central Bank (ECB) in the case of institutions belonging to the SSM, or whether they are top-down, such as those conducted using the FLESB or those performed half-yearly by the ECB and published in its Financial Stability Review on an aggregate basis.

As a result of the two different approaches used, the EBA exercise and the internal BdE exercise differ notably both in the methodology used and in the types of risks analysed, which may give rise to significant discrepancies in the results finally obtained. Therefore these two exercises should be regarded as complementary. The main differences between the two exercises may be summarised as follows:

The EBA exercise is conducted under the static balance sheet assumption, while the FLESB allows changes in exposure according to the scenario considered

(1) First, a significant difference is the assumption about how institutions' balance sheets change during the exercise. The EBA exercise is conducted under the static balance sheet assumption, i.e. that there is no change in the volume of exposure over the time horizon of the exercise, although risk-weighted assets (RWAs) may increase due to credit quality impairment. For its part, the BdE tool allows changes in exposure consistent with the macroeconomic scenario used. For example, if the macro scenario predicts a contraction in the aggregate credit volume, the FLESB methodology transforms this assumption into a decrease in the volume of exposure and RWAs. Under the FLESB framework, credit quality impairment is also transformed into increases in RWAs.

The EBA analysis imposes restrictions on changes in income statement items…

(2) A second major source of differences is how income statements are modelled. The European exercise is based on imposing a set of constraints on the various income statement lines (it generally stipulates a series of floors for expenses or ceilings for revenue). The framework for estimating net interest income is particularly important and includes a series of floors and ceilings on interest rates along with certain assumptions on the pass-through of reference rates to the institutions' asset and liability rates.

…the FLESB, by contrast, is based on institutions' forecasts, adjusted to reflect the macroeconomic scenario

Meanwhile, the BdE approach is based on the so-called funding plans of individual institutions (the business volume and earnings projections prepared by the institutions themselves), adjusted internally by the BdE (through generally conservative adjustments to the funding plans) to adapt them to and reconcile them with the FLESB macroeconomic scenarios.

15 The main characteristics of this tool and the methodology and type of information used were extensively described in the November 2013 FSR: http://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/13/IEF_Ing_Noviembre2013.pdf

16 The importance of scenario feasibility must not divert our attention from the fact that the value added is found when assessing the impact on the solvency of the institutions analysed that is caused by a given shock involving a certain deviation from the baseline or central scenario.

The scope of consolidation is worldwide in the EBA exercise and national in the FLESB exercise

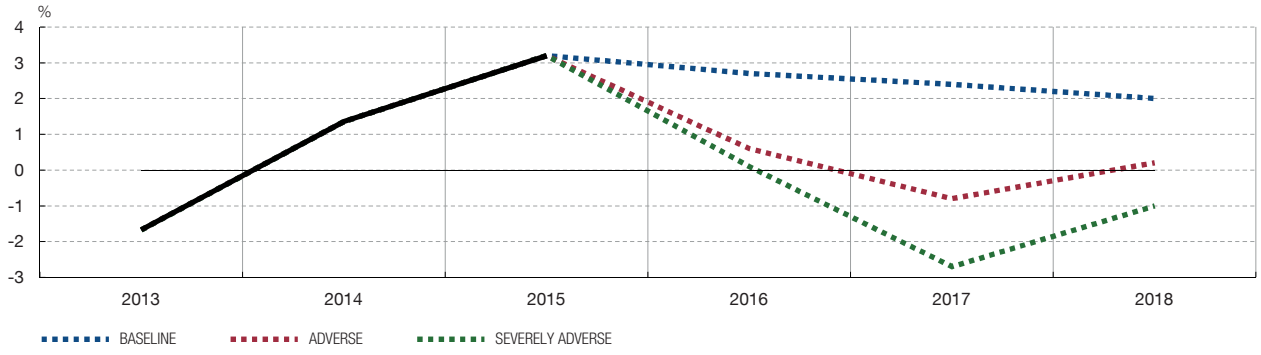
(3) The scope of the exercise differs in the EBA and BdE frameworks as regards the geographical definition of risks and the inclusion of certain risks. While the scope of consolidation for the EBA exercise is the whole world when it comes to establishing the volume of exposure or risk subject to analysis, that of the BdE exercise focuses on business in Spain, given the available information and the desired granularity. The FLESB only considers credit risk, which is the main banking risk, while the EBA exercise also considers other risks, such as operational risk.

In addition to the baseline and adverse scenarios defined by the EBA…

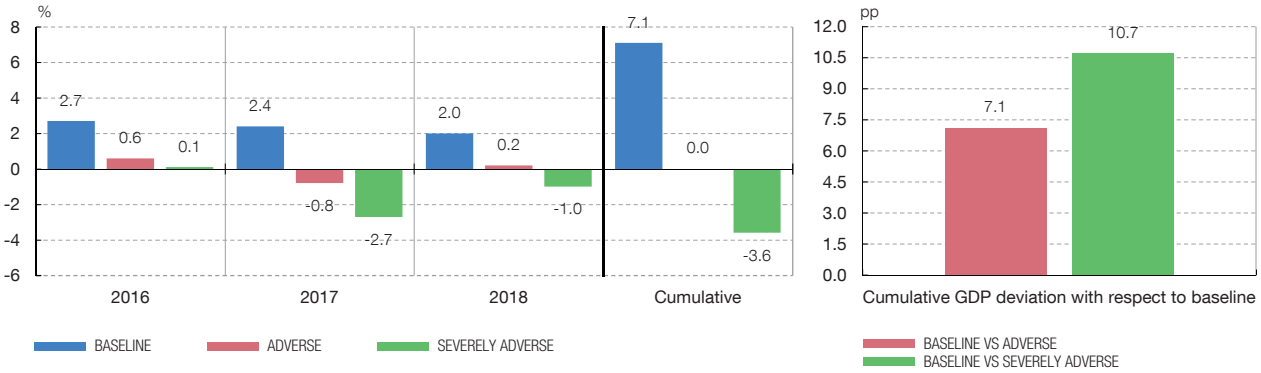
(4) The macroeconomic scenarios used also differ somewhat. Specifically, the exercise conducted by the BdE uses a baseline scenario, an adverse scenario and a severely adverse scenario, while that of the EBA only uses the first two scenarios. The baseline scenario of the BdE coincides with the baseline scenario used by the EBA and is the best estimate of future macroeconomic conditions, subject to the uncertainty inherent in any macroeconomic projection. This scenario is based on the European Commission's projections from last autumn.[17] The adverse scenario also coincides with that used by the EBA in this year's 2016 stress test.[18]

FLESB (a) **CHART 2.30**

A GDP CHANGE IN SPAIN. FORECAST BY SCENARIO



B FORECAST GDP YEAR-ON-YEAR RATE OF CHANGE UNDER THE DIFFERENT SCENARIOS



SOURCE: Banco de España.

a Forward-Looking Exercise on Spanish Banks.

17 For a description of the fundamentals of the European Commission autumn projections, see the link: http://www.eba.europa.eu/documents/10180/1383302/2016+EU-wide+stress+test-Explanatory+note+on+baseline.pdf. For the specific values of the projections of the macro variables, see the link: http://www.eba.europa.eu/documents/10180/1383302/2016+EU-wide+stress+test-Adverse+macro-financial+scenario.pdf

18 The narrative of this scenario, along with its description and the values estimated for a set of significant macroeconomic variables can be found at the link: http://www.eba.europa.eu/documents/10180/1383302/2016+EU-wide+stress+test-Adverse+macro-financial+scenario.pdf

…the FLESB incorporates an additional scenario characterised by greater macroeconomic deterioration

The difference in scenarios with respect to the EBA stress test therefore lies in the use by the FLESB of a third, severely adverse scenario. Its objective is to provide an additional level of macroeconomic stress to the exercise and mitigate the possibility of omitting risks accumulated since the scenario-fixing date, which in the case of the EBA was six months before the stress test was conducted.

The differences in the rate of change of the Spain's GDP across the three scenarios used in the BdE exercise are shown in Chart 2.30. This variable is used to summarise the change in the level of stress between the scenarios, which however comprise a wider set of variables. The data cut-off date for the exercise is December 2015 and the time horizon covers the years 2016, 2017 and 2018.

The adverse scenario is characterised by zero GDP growth and under the severely adverse scenario this variable falls by 3.6% in cumulative terms

Specifically, the adverse scenario entails zero growth of economic activity in cumulative terms, while the severely adverse scenario features a cumulative fall in GDP of 3.6%, i.e. a severe recession in the Spanish economy over the next three years. It can be seen how, compared with the nearly 7.5 pp by which the adverse scenario differs from the baseline scenario, the severely adverse scenario departs from the baseline scenario by somewhat more than 10.5 pp.[19]

Results of the FLESB methodology

Before analysing the results of applying the FLESB, it is necessary to define the various groups of institutions encompassed by the exercise, which differ from those of the EBA exercise. The group of Spanish institutions with significant international activity[20] is analysed separately due to its special features. Specifically, since the FLESB focuses on business in Spain, exposures abroad are not directly subject to impact and therefore no credit loss should be deducted from the amount of capital considered within the full regulatory perimeter.

In this respect, it should be noted that the volume of provisions used relates only to those covering the exposures considered, i.e. they do not include those recorded to cover international non-performing loans. For its part, the estimation of the ability to generate income does include the full scope of consolidation and net income from international activity is subject to a specific estimate (stressed in the case of the adverse scenario) on the basis of the international scenarios involved. This projection of international net income is the channel through which exposures abroad affect the consolidated group's capital.

Under the baseline scenario, the CET1 ratio improves in all the groups of institutions considered

Based on the above, the results set out below classify the institutions on the basis of their degree of international exposure. Chart 2.31 shows the performance of the transitional CET1 capital ratio[21] under the baseline scenario (the most likely central scenario) for the

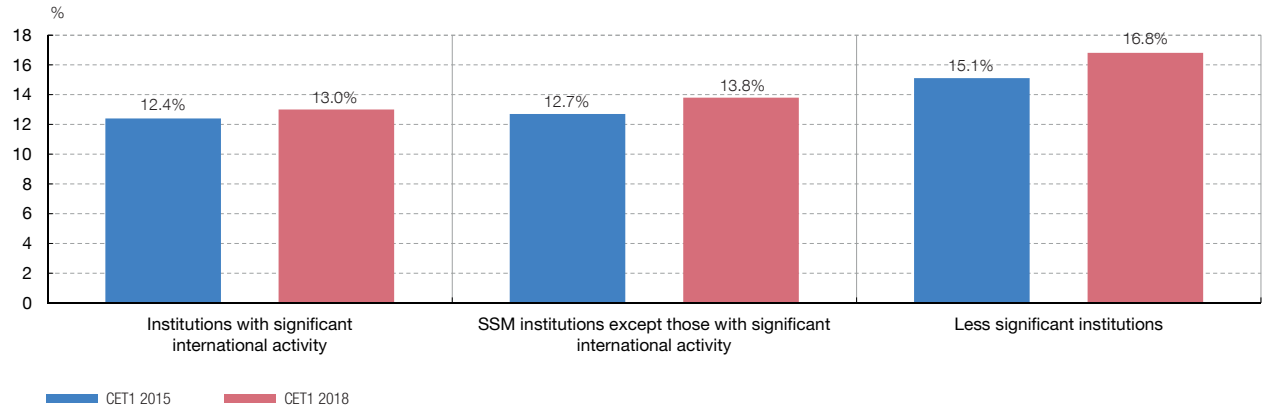
19 Three scenarios are used, for example, in the US CCAR, where there is always a severely adverse scenario with a marked recession.

20 In accordance with Commission Implementing Regulation (EU) No. 680/2014 of 16 April 2014 laying down technical standards with regard to supervisory reporting of institutions, an institution is deemed to engage in significant international activity when the non-domestic original exposures in all "non-domestic" countries and in all categories of exposure are equal to or higher than 10% of total domestic and non-domestic original exposures reported to such effect. In this connection, three institutions have been identified as meeting this condition which, as at December 2015, accounted for 62% of the total assets of the Spanish banking system at consolidated level.

21 The transitional CET1 ratio is calculated as the sum of all eligible capital instruments at a given date less adjusted deductions, in accordance with the phase-in schedule established by the regulation, at that date. Specifically, the CET1 at December 2018 would include the capital requirement items at 2018 less the deductions adjusted by the related phase-in at that date.

IMPACT ON TRANSITIONAL CET1. BASELINE

CHART 2.31



SOURCE: Banco de España.

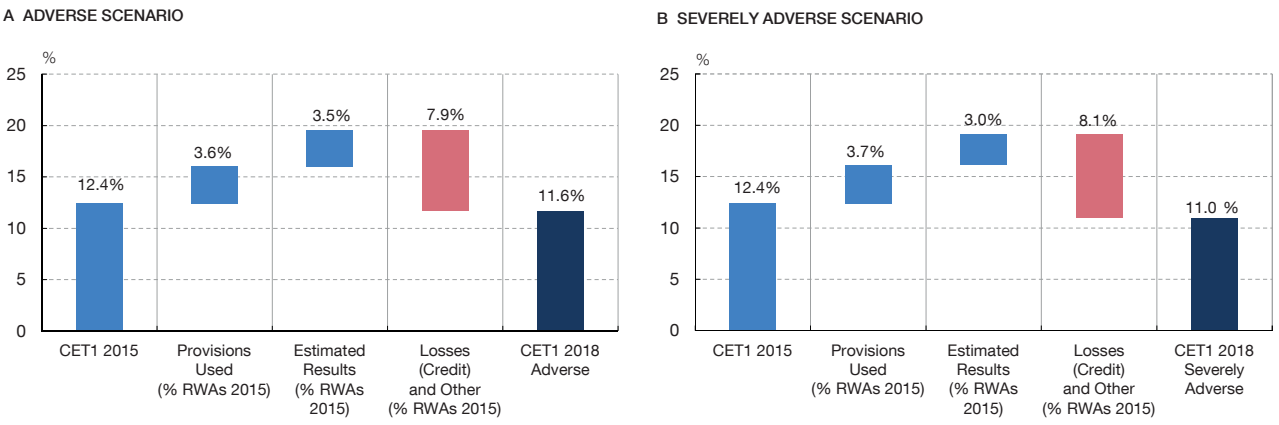
different groups of institutions encompassed in the exercise: institutions with significant international activity, SSM institutions excluding those with significant international activity and the major institutions under direct national supervision (less significant institutions: credit cooperatives, two savings banks and four sizeable banks). An improvement can be observed in the ratio at end-December 2018 across the three groups, ranging from 0.6 pp for institutions with international activity to almost 2 pp for the less significant institutions under direct national supervision.

The transitional CET1 ratio for institutions with significant international activity falls to 11% in 2018 from 12.4% in 2015 under the severely adverse scenario…

The results change radically when the exercise is stressed, i.e. when the institutions' resilience under adverse economic scenarios is analysed. Thus, the impact on the transitional CET1 capital ratio under the adverse and severely adverse scenarios for institutions with significant international activity may be observed (see Chart 2.32). In particular, the estimated impact on the transitional CET1 capital ratio in 2018 under the severely adverse scenario amounts to 1.4 pp of the ratio, i.e. estimated losses and other capital deductions[22] exceed the total volume of items capable of absorbing them (provisions and income). At end-2018 this group of institutions experiences a moderate fall in the transitional CET1 ratio, from 12.4% in 2015 to 11% in 2018.

IMPACT ON TRANSITIONAL CET1 RATIO. INSTITUTIONS WITH SIGNIFICANT INTERNATIONAL ACTIVITY

CHART 2.32

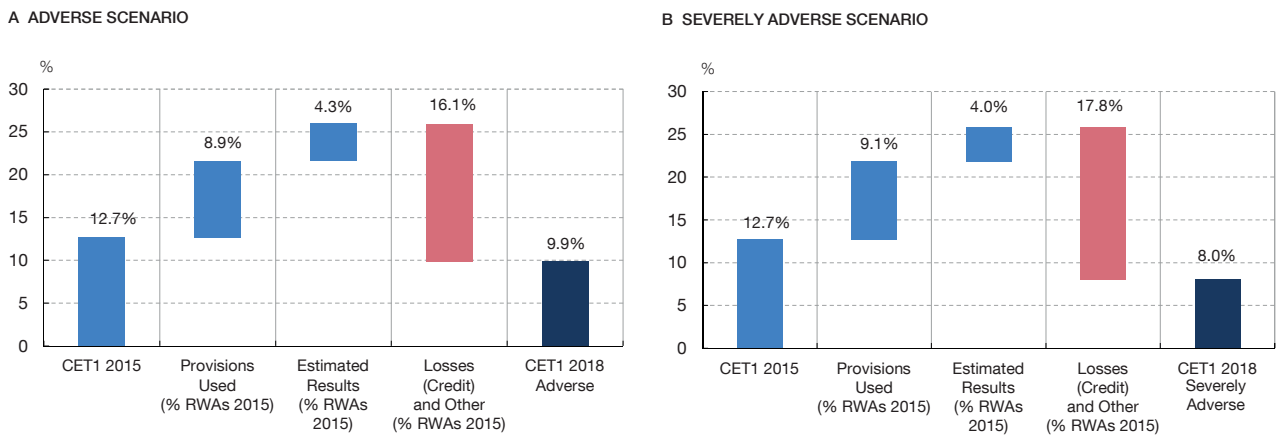


SOURCE: Banco de España.

22 The progressive application of greater phase-in percentages causes institutions' CET1 to change above and beyond the impact from the losses incurred in the analysis period, resulting in an additional adjustment residual.

IMPACT ON TRANSITIONAL CET1 RATIO.
SSM INSTITUTIONS EXCEPT THOSE WITH SIGNIFICANT INTERNATIONAL ACTIVITY

CHART 2.33



SOURCE: Banco de España.

...while in the adverse scenario CET1 stands at 11.6% in 2018

Under the adverse scenario, which coincides with that of the EBA, this group of institutions would end the exercise with a capital ratio of 11.6%, with an impact on the ratio of just 0.8 pp. As the chart shows, a milder scenario implies lower impact on losses and greater income generation capacity and, consequently, a smaller decrease in capital.

The second group of institutions analysed is that subject to direct supervision by the SSM, excluding those with significant international activity. Chart 2.33 shows the impact on solvency for this group of institutions under adverse and severely adverse scenarios.

The other institutions directly supervised by the SSM start at a CET1 ratio of 12.7% in 2015...

The starting point for this group of institutions in 2015 is a CET1 ratio of 12.7%. As in the former group, the volume of projected losses under the severely adverse scenario is not absorbed by existing provisions or by projected income for the time horizon established, finally giving rise to an impact on capital of 4.7 pp of the ratio.

...which declines by 4.7 pp in 2018 under the severely adverse scenario...

Notably, there is a significant volume of estimated losses (17.8% in terms of RWAs), which reflects the impact of this scenario on credit exposures (more than double the estimated losses of institutions with international activity). Even with such a high volume of losses, on completion of the stress exercise the capital ratio for this group of institutions is slightly above 8%, also exceeding the regulatory minimum required in 2018, albeit less amply than the foregoing group of institutions.

...and by 2.8 pp under the adverse scenario

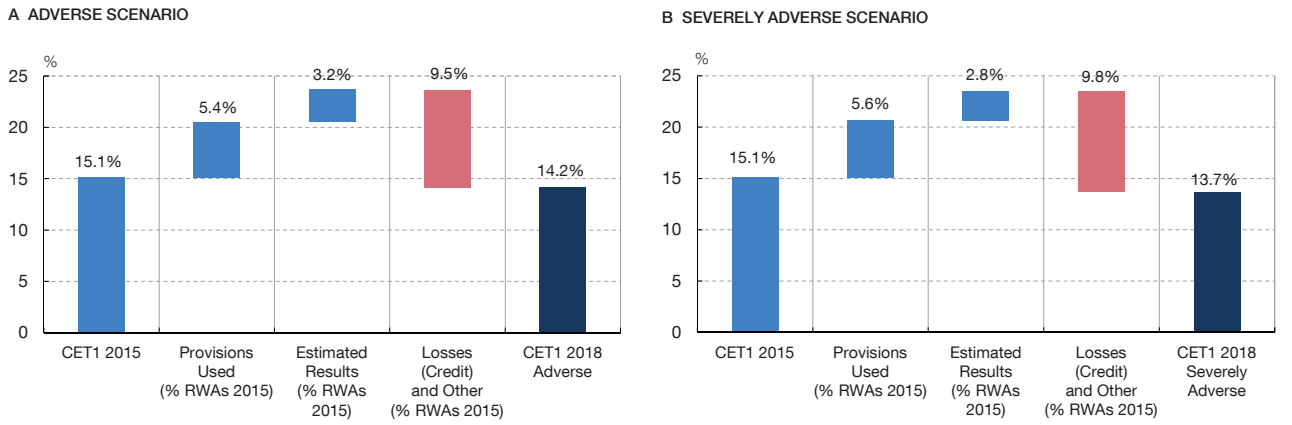
Chart 2.33.A also shows that the impact under the adverse scenario is lower than under the severely adverse scenario. In general, the volume of losses is smaller, 1.7 pp less, earnings are higher with an additional 0.3 pp of loss absorption capacity and the amount of the provisions used is lower owing to the decline in estimated losses. As a result, the transitional CET1 capital ratio for 2018 is 2.8 pp lower than for 2015 (the impact is 1.9 pp below that of the severely adverse scenario).

For the less significant institutions under direct national supervision, the impact is similar to that for the group of institutions with international activity

Finally, Chart 2.34 sets out the outcome of the stress test on the group of less significant institutions that is subject to direct national supervision. The initial CET1 ratio for this group is 15.1%, higher than that of the two foregoing groups. The impact on capital in pp of RWAs is quite similar to that for the group of institutions with international activity and much lower than that estimated for the group of SSM institutions without significant international activity.

IMPACT ON TRANSITIONAL CET1 RATIO.
OTHER SPANISH DEPOSIT INSTITUTIONS

CHART 2.34



SOURCE: Banco de España.

As can be seen, the CET1 solvency ratio at the end of the exercise is also clearly higher than the regulatory minimum required at end-2018. The results under the adverse scenario imply a decline in the capital ratio of 0.9 pp, to 14.2% at end-2018. Under the severely adverse scenario the capital ratio decreases by 1.4 pp, to 13.7%.

The estimated impact on credit losses is slightly higher than for the group of institutions with international activity, but clearly lower than for the other SSM institutions. The volume of provisions used is in line with the volume of estimated losses. Notably, the ability of less significant institutions to generate income under the adverse scenarios is lower than that of institutions subject to direct SSM supervision.

These results suggest that under the scenarios considered, the solvency ratios of institutions would continue to exceed the minimum requirements

In summary, the stress test conducted suggests that although the Spanish banking system would experience a significant reduction of capital levels in a severely adverse macroeconomic scenario, it would still manage to maintain a level of solvency in excess of the regulatory minimum requirement, with more or less slack depending on the type of institutions considered. These findings are in line with those obtained by the EBA stress test, but because of the differences between the two stress test methodologies (top-down vs. bottom-up approach, static or dynamic balance sheet assumption, etc.) and the sample of institutions covered in both cases, a direct quantitative comparison is not possible.

3.1 Analysis of macroprudential risks

The Banco de España has developed a risk map for monitoring the financial situation and the detection of potential systemic risks…

The Banco de España regularly monitors macroprudential risks using a tool that comprises a set of over one hundred indicators in different categories.[1] As described in the previous FSR, this tool converts into a risk map the information from indicators on credit, the housing market, the structure of liquidity, the maturities of bank assets and liabilities, credit portfolio concentration and NPLs in the banking system, and the situation on financial markets and developments in the real economy. It is, therefore, a tool for monitoring the situation of the financial system and the detection of potential systemic risks.

… which is a widespread practice internationally, supportive of setting the macroprudential policy stance

The development of macroprudential risk monitoring and assessment tools is a widespread practice internationally. In Basel, the Committee on the Global Financial System has pooled the experiences of the different central banks in the ex-ante appraisal of macroprudential policy decisions.[2] The working group, in which the Banco de España has participated, has drawn together numerous case studies and examples that illustrate the different stages of the assessment process at the international level with a view to sharing and learning from other approaches. In Spain's case, the risk map is supportive in defining the overall macroprudential policy stance. This tool has been further improved in recent months by means of the extension of indicators relating to market liquidity and real estate sector prices.

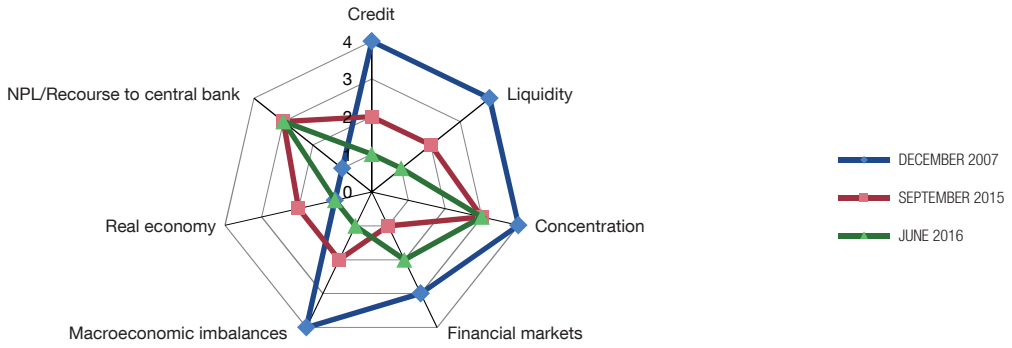
Most risks lie outside alert levels or are at a low risk level, with the exception of the banking situation, which is at a medium level as a result of still-high NPLs

Chart 3.1 shows the situation of the summary risk map at the latest available date. Generally, most risk categories (credit, liquidity, financial markets, real economy and macroeconomic imbalances) lie outside alert levels or at a low risk level with the exception of the banking situation, where a medium-alert level is observed. This is a consequence of pre-crisis imbalances materialising as higher bank NPLs. Although NPLs have fallen

1 Details on the categories of the indicators, their aggregation and the viewing thereof have been published in Banco de España Occasional Document 1601.

2 See CGFS (2016), «Experiences with the ex-ante appraisal of macroprudential instruments», CGFS publications No 56.

HEAT MAP (a) **CHART 3.1**



SOURCE: Banco de España.

a The heat map levels are shown graphically in seven categories. The credit risk category groups together indicators on the changes in and degree of imbalance of total and bank lending to households, non-financial corporations and the non-financial private sector in its entirety; the levels of debt burdens of these sectors; the rates of interest on new lending and on outstanding balances; and the changes in and imbalances of house prices. The total credit data are provisional estimates as at June 2016. The liquidity risk category includes indicators on bank and market liquidity. The concentration category includes indicators on total and bank credit concentration in different sectors and by type of borrower. The financial markets category groups indicators on correlations and interconnection between banks and on systemic stress in different markets. The macroeconomic imbalances category includes indicators on external debt, the public sector and the current account balance. The real economy category includes indicators on economic growth and unemployment. The NPLs and recourse-to-central bank category includes indicators on NPLs and central bank loans to financial institutions. The concentric line closer to the centre of the chart refers to a normal situation, while the higher the risk level, the greater the distance to the centre.

notably in the past three years, they continue to be high relative to the historical average, as is credit portfolio concentration, the legacy of the previous expansionary phase. The concentration and NPLs indicators are more backward-looking than the other indicators, which explains their higher level at present. This is why this category remains at a medium-alert level. Elsewhere, the potential macroeconomic imbalances have continued to improve since the last FSR. Both these potential imbalances and the actual conditions of the real economy currently lie outside alert levels. A gradual improvement in these risk categories has been witnessed since late 2012.

Compared with the situation reflected in the last FSR (with reference to September 2015), there has been a slight reduction in risk in the liquidity category, owing to the reduction in market volatility in 2016 Q2 following the bouts of turbulence observed in Q1. However, bank share prices have diminished significantly and this is reflected in the slight increase in risk in the financial markets category. That said, both these categories and that relating to credit remain in a situation of low alert, indicating that currently there is no evidence of an increase in risks that may jeopardise the stability of the Spanish financial system.

3.2 Macroprudential decisions and initiatives

As explained in the previous FSR, the Banco de España has a series of macroprudential instruments whose defining characteristics are laid down in European regulations.[3] One of these instruments is the countercyclical capital buffer (CCB), whose objective is to ensure that the banking sector as a whole has an additional capital buffer to help maintain the flow of credit to the economy without the system's solvency being endangered under situations of stress in the financial system.

Countercyclical capital buffer

The CCB required of banks has been held at 0% for 2016 Q4

As from 1 January 2016, the Banco de España announces quarterly the CCB-related requirements that banks must maintain. For 2016 Q4, the decision was to keep the CCB rate applicable to credit exposures in Spain at 0%. This decision is based on the technical analysis of specific quantitative indicators, in addition to qualitative information and expert judgement.[4]

The credit/GDP ratio continues to diminish…

Table 3.1 shows the status of these indicators as at June 2016. In greater detail, Chart 3.2.A shows the credit/GDP ratio and its long-term trend. It can be seen that in the period prior to the recent systemic banking crisis (2009 Q2-2013 Q4) there was a notable increase in the economy's indebtedness (with credit as a proportion of GDP rising to 220% in June 2010). Since then, the credit/GDP ratio has declined in a sustained fashion and at present stands at close to 170%. Consequently, this indicator is consistent with the ongoing correction of the imbalances accumulated and, therefore, it does not evidence the need to activate the CCB at present.

… and the credit-GDP gap stood in June 2016 at -62 pp, stabilising to some degree but still at levels far below the CCB activation threshold suggested by Basel

The credit-GDP gap seeks to measure the excess of credit in terms of output relative to its long-term or equilibrium level. The credit-GDP gap is calculated as the percentage-point difference of the ratio of total credit to the non-financial private sector, divided by GDP, less the long-term trend of this ratio estimated using a statistical filter. In June 2016, this indicator stood close to –62 pp (see Chart 3.2.B). While some stabilisation seems apparent

3 EU Directive 2013/36/EU (CRD IV) and Regulation (EU) 575/2013 (CRR). Also, Banco de España Circular 2/2016 develops these competencies in a more detailed fashion, along with information transparency requirements and the relationship with the European authorities. The use of these regulatory instruments falls under the remit of macroprudential policy, whose aim is to contribute to the safeguarding of the financial system as a whole. A general description of the Banco de España's macroprudential policy objectives, instruments and indicators can be seen in Occasional Document 1601.

4 The decision taken in September 2016 was based on the information on credit available as at that time, corresponding to March 2016.

CREDIT-GDP GAP AND COMPLEMENTARY CORE INDICATORS TO GUIDE THE ACTIVATION OF THE CCB IN SPAIN (a) TABLE 3.1

	Latest value (June 2016)	Previous quarter	Average since 1970	Minimum since 1970	Maximum since 1970	Standard deviation since 1970	Average 1999-2008 (b)	Minimum since 1999	Maximum since 1999
1 Credit-GDP gap (c)	-61.7	-61.4	1.1	-61.7	45.4	21.3	30.7	-61.7	45.4
2 Credit/GDP ratio	167.4	169.7	117.5	73.4	217.7	48.3	148.9	91.5	217.7
3 Credit intensity (d)	-5.1	-7.7	10.5	-17.1	35.8	10.1	21.6	-17.1	35.8
4 Prices in the real estate sector (e)	[-18.7 -14.7]	[-18.7 -14]	[-5.7 -2.8]	[-43 -31.7]	[22.6 27.8]	[13.3 18.1]	[5.8 13.9]	[-43 -31.7]	[20.6 26.5]
5 Non-financial private sector debt burden (f)	16.3	16.6	18.3	12.0	24.4	2.9	17.7	12.5	24.4
6 External imbalances (g)	2.5	1.6	-2.3	-10.3	3.2	3.0	-6.1	-10.3	2.5

SOURCE: Banco de España.

a These values may differ slightly from those published in previous press releases due to data update (flash estimates) published by INE and because total credit data are provisional estimates as at June 2016.
b The year 1999 marks Spain's joining the euro area; the year 2008 marks the last year before the start of the recent systemic banking crisis in Spain.
c The credit-GDP gap is calculated as the deviation of the credit-GDP ratio from its long-term trend, using a one-tailed Hodrick-Prescott filter (smoothing parameter equal to 400,000).
d The credit intensity indicator is calculated as the annual difference in credit to the non-financial private sector divided by cumulative GDP of the last four quarters.
e The ranges in each column show minimum and maximum values of a set of indicators of price developments in the real estate sector in respect of their long-term trends, obtained using a one-tailed Hodrick-Prescott filter (smoothing parameter equal to 400,000 in all cases).
f Use is made of the debt service ratio in the non-financial private sector, calculated according to the specification in Drehmann M. and M. Juselius (2012) "Do debt service costs affect macroeconomic and financial stability?", BIS Quarterly Review, September.
g The indicator of external imbalances is calculated as the current account balance divided by GDP.

since the previous quarter, this figure is clearly far off the activation threshold (2 pp) following the pattern suggested by Basel.[5]

The indicator of credit intensity remains in negative territory…

The indicator of credit intensity seeks to capture information on the acceleration in credit growth in terms of output over a period of one year. The indicator is calculated as the annual change in aggregate credit (numerator) divided by the cumulative output for the same period (denominator).[6] Chart 3.2.C reveals that although there is a change in trend in this indicator as from December 2013, as a result of a slowdown in the decline in aggregate credit, it remains as at June 2016 in negative territory. This indicator is, therefore, still clearly below levels symptomatic of an excessive acceleration and, accordingly, the need to activate the CCB at this point does not arise.

…and the debt burden indicator shows improvements in the sustainability of private sector debt as a whole, owing both to the reduction in debt and to that in its cost

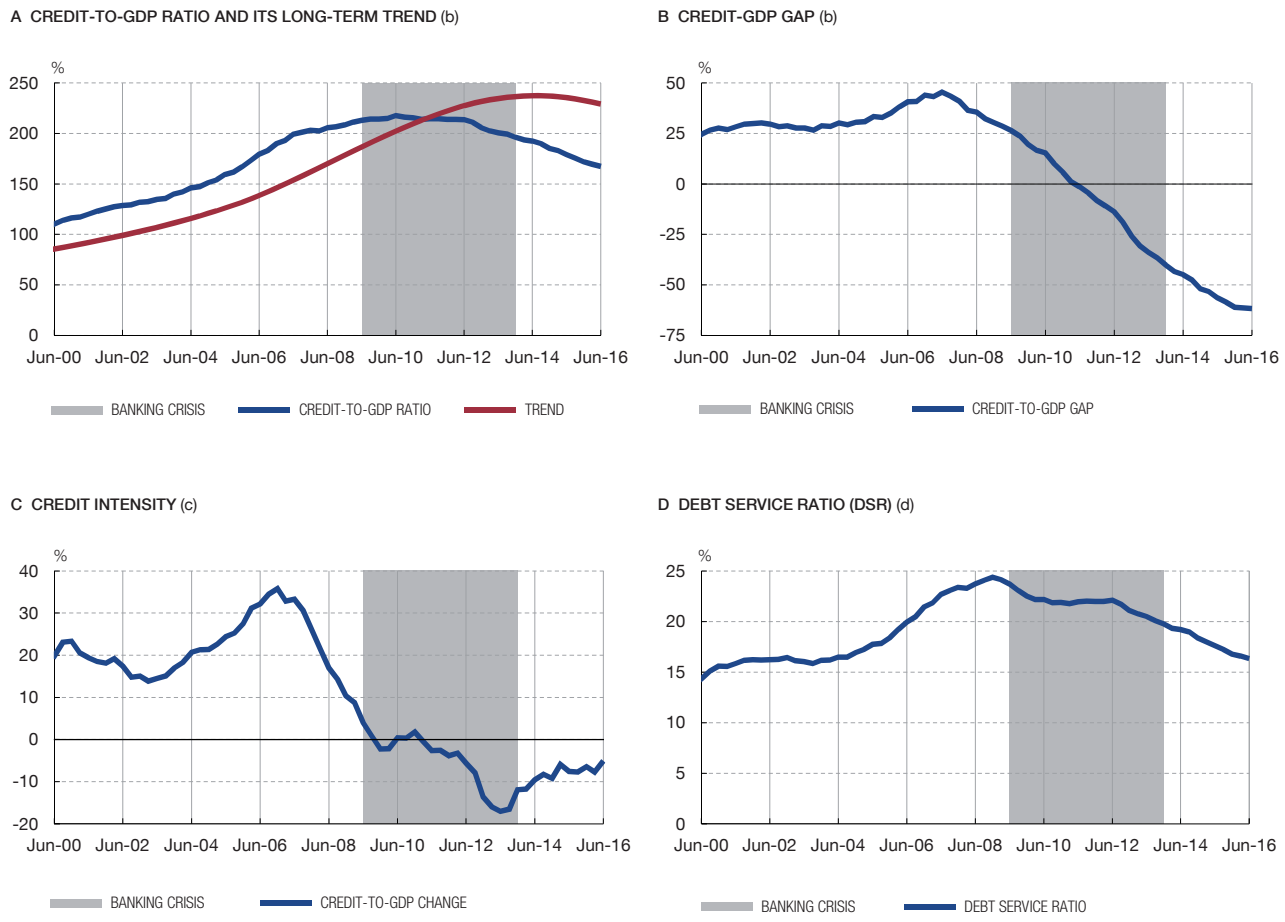
The private sector debt burden indicator (debt service ratio, DSR) seeks to capture possible situations of private sector debt unsustainability enabling anticipation of, inter alia, a possible increase in the number of doubtful loans. The DSR is defined as the ratio of interest and principal payments to aggregate disposable income, so it measures the affordability of debt payments with respect to disposable income.[7] Chart 3.2.D shows that the level of the indicator has been declining almost constantly since the start of the recent crisis. This is consistent with a gradual and sustained correction of the high level of indebtedness reached during the run-up to the crisis in the private sector and with a significant reduction in the average cost of such debt. Generally, this indicator shows that

5 Following this rule, when the credit-GDP gap is less than or equal to 2 pp, the corresponding countercyclical capital buffer requirement is 0%, and when the credit-GDP gap exceeds 2%, the buffer applicable increases in a linear fashion until reaching the level of 2.5% when the credit-GDP gap reaches 10%.

6 In addition, banks' perception of the sustainability of private indebtedness may encourage/restrict the availability of credit in good/bad times, thereby amplifying the fluctuations in the credit cycle. This indicator is included under the category "credit measures" within the group of complementary indicators for guiding the setting of the CCB in Recommendation ESRB/2014/1.

7 The indicator is constructed according to a standard formula for calculating the present value of a fixed-term loan (using the stock of aggregate credit along with an average interest rate and maturity), divided by disposable income.

COMPLEMENTARY CORE INDICATORS FOR THE ACTIVATION OF THE CCB (a) CHART 3.2



SOURCE: Banco de España.

a The shaded area shows the last period of financial crisis in Spain which refers to the systemic banking crisis (2009 Q2-2013 Q4).
b The trend of the credit-to-GDP ratio is calculated using a one-tailed Hodrick-Prescott filter (smoothing parameter equal to 400,000).
c The credit intensity indicator is calculated as the annual difference in credit to the non-financial private sector divided by cumulative GDP of the last four quarters.
d The debt service ratio is calculated according to the specification in Drehmann M. and M. Juselius (2012) "Do debt service costs affect macroeconomic and financial stability?", BIS Quarterly Review, September.

the sector is continuing to adjust the imbalances built up, and there are no signs that the expansionary phase has begun. Accordingly, nor does this indicator emit signals favouring the activation of the CCB.

The information analysed consistently and homogeneously supports the decision not to activate the CCB

Therefore, both the central indicators and the information analysed currently offer mutually consistent and sufficiently homogeneous signals supporting the decision not to activate the CCB at present.

Reciprocity framework for macroprudential measures in the EU. Initial steps

The ESRB has approved the reciprocity framework for macroprudential measures in the EU…

Notable among the most recent changes in the macroprudential regulatory field are a new recommendation by the European Systemic Risk Board (ESRB) on the reciprocity framework for EU Member States.[8] While EU Directive 2013/36/EU (CRD IV)[9] and Regulation (EU)

8 Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures.
9 EU Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

575/2013 (CRR)[10] contained provisions which, for certain instruments, stipulated the obligation of reciprocity[11], there was no general framework for macroprudential instruments as a whole.

…with the aim of curbing undesirable cross-border effects that may arise from the macroprudential measures adopted by a Member State…

This initiative of the ESRB reflects the awareness that macroprudential measures may have cross-border effects, or prove insufficient domestically if they do not oblige all agents, including those belonging to another jurisdiction, who are involved in the formation of the risk it is sought to curb (see Chart 3.3). For instance, if risks are detected in the housing market, the macroprudential authority may set, inter alia, an increase in the risk weightings of mortgage loans in order to restrict the growth of credit activity in this segment by increasing the consumption of capital of these exposures. But if the measure is only applied to institutions regulated by the national authority (i.e. if there is no reciprocity mechanism), undesirable effects may arise, such as the recourse of the private sector to non-resident banks to obtain mortgage financing, which might neutralise the measure taken. Another illustrative case would be the requirement of an additional capital buffer in the face of excessive credit growth, which may have a bearing not only on the granting of credit at the domestic level but also on that of other jurisdictions (cross-border effect) in which the presence of the national banking sector is significant.

… setting a cross-country cooperative framework that promotes equivalent regulatory treatment irrespective of the jurisdiction to which agents belong

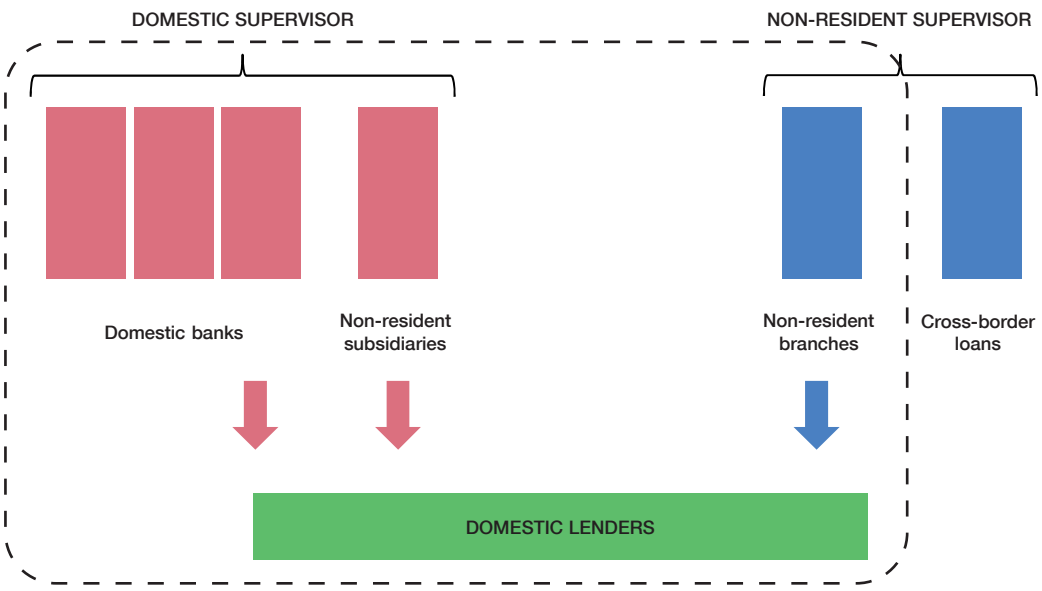
The cross-border nature of macroprudential policy highlights the need for an inter-jurisdictional cooperative framework that recognises the application of the measures approved by the national supervisor outside its legal scope. The aim here is to seek to increase the effectiveness and consistency of regulation, which is important in a region such as the EU which has a high degree of financial integration. The underlying idea is to ensure that exposure to the same risk has an equivalent regulatory treatment irrespective of the jurisdiction to which the agents concerned belong.

10 Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

11 Specifically, for the countercyclical capital buffer (up to 2.5%) and for the requirement of an increase in risk weighting or of a greater LGD (Loss Given Default) for real estate exposures, there is an obligation to adopt equivalent measures in national jurisdiction.

OUTLINE OF THE APPLICATION OF MACROPRUDENTIAL MEASURES

CHART 3.3



SOURCE: Banco de España.

Before adopting a macroprudential measure, the national authorities have to assess its cross-border effects and, in order to activate reciprocity, request this of the ESRB, which will recommend the measure to the other members if it deems it is advisable

The procedure to activate cross-country reciprocity is relatively straightforward. The ESRB recommendation stipulates that the national authority that approves a macroprudential measure should, before the adoption of new measures, assess the potential cross-border effects, both in its own jurisdiction and outside it. If there is an observed need to request reciprocity of other EU Member States, the ESRB will be duly notified, and will assess the request and, where appropriate, will recommend reciprocity to the other Member States in respect of the exposure their respective institutions have in that country.[12] Finally, the authorities of the other Member States shall apply the same measure as that approved in the requesting country, or the measure most equivalent thereto were it not to exist under national legislation, in addition to informing the ESRB.

Compliance with the recommendations is not obligatory, but reasons should be given for failure to comply. The ESRB also introduces an exemption for "non-materiality" of cross-border effects

As with all ESRB recommendations, obligatory compliance is not demanded, but it is necessary to properly explain the reasons in the event of failure to comply. Indeed, there is one justified reason for non-compliance, given that the ESRB recommendation provides for an exemption in the application of reciprocity for cases in which exposure to the macroprudential risk identified is not material. This "non-materiality" principle does not alter the essential objective sought by the reciprocity framework (effectiveness and consistency of the macroprudential measures across jurisdictions), and lessens the regulatory burden to which institutions are subject. The second qualifying factor concerns the nature of the reciprocity. In principle, reciprocity cannot be said to be automatic, since compliance with ESRB recommendations is not obligatory.

The Banco de España has adopted the ESRB recommendation and has assessed two reciprocity requests, rejecting them for failing to meet the materiality thresholds

The Banco de España has adopted the ESRB recommendation, and has begun to assess the reciprocity requests made by other Member States. To date, there have been two reciprocity requests under the framework described. The first was a request from Belgium to raise the risk weightings of mortgage exposures, measured by the IRB method, by 5 pp.[13] The second was a request from Estonia to introduce a systemic risk buffer of 1% applicable not only to institutions supervised by the Estonian authority but also to the branches of non-resident institutions and to cross-border activity in this market.[14] In both cases the Banco de España has determined, following criteria agreed within the ESRB, that Spanish institutions' exposures to these countries do not meet the materiality thresholds susceptible to contributing to the macroprudential risks detected in the countries requesting reciprocity. Accordingly, it has not been necessary to adopt any measure.

In the future, reciprocity requests are likely to continue to be made as the Member States progressively make use of the macroprudential toolkit available in the regulations. The Banco de España will continue studying each request individually, while regularly assessing the cross-border impact of its own macroprudential decisions, and the advisability of requesting reciprocity of other Member States. In addition, given the growing inter-dependence among the European countries' financial systems, it will be necessary to reflect on what the most suitable conceptual framework should be to assess the cross-border effects of macroprudential policy.

Countercyclical capital buffer in third countries

The ESRB has also adopted a recommendation for the...

The potential cross-border effects of macroprudential policy are not confined to the area of the EU described above; rather, there may be inter-dependencies with other countries.

12 The ESRB has other alternatives to pure reciprocity if, in the cost-benefit analysis, it is determined that the measure to be reciprocated entails costs that are difficult for other Member States to assume. These include amending the measure or considering replacing it with another with a better cost-benefit trade-off. Ultimately, the ESRB may not recommend reciprocity if the cross-border effects are substantial and cannot be reasonably mitigated.

13 Recommendation ESRB/2016/3. The Belgian authorities resorted to Article 458 of the CRR ("flexibility package") in order to approve this measure.

14 Recommendation ESRB/2016/4. Articles 133-134 of the CRD IV.

...recognition and setting of the CCB for exposures to countries outside the EU

However, while the application of reciprocity is automatic for the CCB within the EU, it is not so for third countries outside the EU. This has recently led the ESRB to publish a recommendation in this connection.[15] The aim of the recommendation is to help EU Member States determine in a uniform fashion – if the CCB set in third countries does not seem appropriate – a CCB in respect of their exposures to the same country outside the EU. In this way it is sought to avoid regulatory arbitrage opportunities among European countries that have materially significant exposures to the same non-Community country and, in turn, to ensure a suitable degree of protection for the European banking system against systemic risks due to excessive credit growth that may arise in non-EU countries.

The Banco de España has adopted this measure, defining material countries as those in which the risk-weighted exposures held by Spanish institutions exceed 2% of total exposure

As with the previous recommendation, this recommendation has also been adopted by the Banco de España. The first step needed for compliance with the recommendation is the specification, by the Banco de España, of the "material countries" for Spanish banks. That is to say, those non-EU countries with which the Spanish banking system has significant exposures. For a country to be classified as material, it has been established that risk-weighted exposures to this country should exceed a given percentage of the total of risk-weighted exposure, following the methodology proposed by the ESRB. This threshold has been set at 2%.

The countries exceeding this threshold as at December 2015 are the United States, Brazil, Mexico, Turkey and Chile…

The results of the study conducted, with data as at December 2015, identify the countries above the 2% threshold of total risk-weighted exposures as, in descending order of exposure, the United States, Brazil, Mexico, Turkey and Chile. On aggregate, these five countries account for around 85% of the Spanish banking system's exposure to third countries, measured in terms of risk-weighted assets. Bearing in mind that total exposure to third countries is 30.6%, this list of five countries may be considered as covering most of the risks arising from exposures to third countries, hence it does not seem necessary to monitor the other countries so exhaustively in terms of the potential use of a CCB for these exposures.

… whereby the Banco de España, in coordination with the ESRB, will subject credit developments in these countries to special monitoring

As discussed, the fundamental aim of this recommendation is to prevent problems arising from excessive credit growth in these countries from generating systemic risks in Spain. In this connection, the Banco de España will specially monitor credit cycle developments in the selected countries. This monitoring will be in coordination with the ESRB, which is conducting a similar analysis on the countries that are material for the EU as a whole.

15 Recommendation ESRB/2015/1 recognising and setting countercyclical buffer rates for exposures to third countries.

CONSOLIDATED BALANCE SHEET. DEPOSIT INSTITUTIONS

ANNEX 1

ASSETS	Jun-16	Change Jun-16/ Jun-15	Relative Weight Jun-15	Relative Weight Jun-16
	€m	%	%	%
Cash and balances with central banks	139,953	17.3	3.3	3.8
Loans and advances to credit institutions	211,384	5.8	5.5	5.8
General government	131,943	10.0	3.3	3.6
Other private sectors	2,056,035	0.2	56.1	56.0
Debt securities	577,096	-6.5	16.9	15.7
Other equity instruments	41,529	-21.4	1.4	1.1
Investments	39,688	8.9	1.0	1.1
Derivatives	200,225	15.5	4.7	5.5
Tangible assets	52,351	3.7	1.4	1.4
Other	222,018	-6.4	6.5	6.0
TOTAL ASSETS	**3,672,221**	**0.4**	**100.0**	**100.0**
Memorandum items				
Financing to private sector	2,162,200	-1.0	59.7	58.9
Financing to general government	555,656	2.8	14.8	15.1
Total NPLs	153,887	-13.7	4.9	4.2
Total NPL ratio	5.04	-87.6 (b)		

LIABILITIES AND EQUITY	Jun-16	Change Jun-16/ Jun-15	Relative Weight Jun-15	Relative Weight Jun-16
	€m	%	%	%
Balances from central banks	177,968	-11.8	5.5	4.8
Deposits from credit institutions	355,802	-3.6	10.1	9.7
General government	105,798	-1.5	2.9	2.9
Other private sectors	1,946,913	1.9	52.2	53.0
Marketable debt securities	440,723	0.1	12.0	12.0
Derivatives	196,133	12.5	4.8	5.3
Provisions for pensions, tax and other	35,880	-0.3	1.0	1.0
Other	140,903	-8.2	4.2	3.8
TOTAL LIABILITIES	**3,400,120**	**0.2**	**92.7**	**92.6**
Memorandum items				
Eurosystem net lending (a)	136,949	-2.0	3.8	3.7
Own funds	253,801	2.1	6.8	6.9
Minority interests	35,079	26.6	0.8	1.0
Valuation adjustments relating to total equity	-16,779	54.7	-0.3	-0.5
TOTAL EQUITY	**272,101**	**2.5**	**7.3**	**7.4**
TOTAL LIABILITIES AND EQUITY	**3,672,221**	**0.4**	**100.0**	**100.0**

SOURCE: Banco de España.

a Difference between funds received in liquidity-providing operations and funds delivered in absorbing operations. July 2016 data (latest available) and July 2015 data, to maintain the year-on-year comparison.
b Difference calculated in basis points.

CONSOLIDATED INCOME STATEMENT
DEPOSIT INSTITUTIONS (a)

	Jun-16		Jun-15	Jun-16
	€m	% Change Jun-16/Jun-15	% ATA	% ATA
Financial revenue	56,062	-3.2	3.18	3.07
Financial costs	22,278	-3.2	1.26	1.22
Net interest income	33,784	-3.2	1.91	1.85
Return from capital instruments	1,088	17.1	0.05	0.06
Net financial income	34,872	-2.7	1.96	1.91
Share of profit or loss of entities accounted for using the equity method	2,103	-10.3	0.13	0.12
Net commissions	12,003	-0.3	0.66	0.66
Gains and losses on financial assets and liabilities	4,551	-36.8	0.40	0.25
Other operating income (net)	-746	.	-0.02	-0.04
Gross income	52,783	-7.5	3.13	2.89
Operating expenses	26,276	0.0	1.44	1.44
Net operating income	26,508	-13.9	1.69	1.45
Asset impairment losses (specific and general provisions)	9,814	-21.4	0.68	0.54
Provisioning expense (net)	2,943	12.1	0.14	0.16
Income from disposals (net)	-917	.	-0.02	-0.05
Profit before tax (including discontinued operations)	12,834	-16.4	0.84	0.70
Net income	9,387	-23.6	0.67	0.51
Memorandum item				
Income attributable to the controlling entity	7,635	-28.8	0.59	0.42

SOURCE: Banco de España.

a Income statement for all deposit institutions. The magnitude is the amount accumulated during the first half of 2016. The percentage of ATA is annualised.

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1 The publications in this section distributed by the Banco de España [all of them, except those marked (*) and (**), which are distributed by Alianza Editorial and Macmillan (London)] have been removed from the catalogue.
2 Moreover, it is updated daily in the Statistics section.
3 A quarterly update of the tables of this publication is also disseminated on the Internet.
4 Available only on the Banco de España website until it is included in the publication *Circulares del Banco de España. Recopilación.*

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