FINANCIAL STABILITY REPORT

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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
CCyB	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
EMEs	Emerging market economies
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
ESTER	Euro short-term rate
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
GHOS	Group of Central Bank Governors and Heads of Supervision
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

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

LTROs	Longer-term refinancing operations
LTV	Loan-to-value ratio (amount lent divided by the appraised value of the real estate used as collateral)
m	Millions
MiFID	Markets in Financial Instruments Directive
MMFs	Money market funds
MREL	Minimum Requirement for own funds and Eligible Liabilities
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
KY	Cayman Islands
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

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1 Key developments

Since the publication of the previous Financial Stability Report (FSR), risks have clearly increased. In particular, several factors might lead to a sharp re-evaluation of risk premia, prompting an additional tightening in financial conditions. Such factors include most notably: the heightening of trade tensions; the normalisation of US monetary policy; the increase in political and economic uncertainty in Italy; the lack of agreement on a negotiated exit for the United Kingdom from the European Union; and a continued appreciation of the dollar and the euro against the emerging countries' currencies, which would make these countries' economies more vulnerable.

Notwithstanding, the Spanish economy has held on its expansionary path, though with growth showing a tendency to decelerate. Indeed, the forecasts for such growth (published in late September) have been revised slightly downwards, meaning that the rate of expansion of activity in terms of GDP growth currently stands at 2.6% for 2018, 2.2% in 2019 and 2% in 2020. The Spanish unemployment rate has continued falling (14.6% in the third quarter of 2018), although the downward trend has eased somewhat in recent quarters. The financial position of households and non-financial corporations has continued to improve and their debt levels to decline.

Nonetheless, given the predominance of short-term and/or variable-rate financing, this situation might worsen should a scenario of tightening financial conditions that were not accompanied by an improvement in the income of households and non-financial corporations materialise. Moreover, the debt levels of general government and of the economy as a whole vis-à-vis the external sector remain very high, which raises the Spanish economy's vulnerability to adverse future developments in activity or in financing conditions.

In the first half of 2018 Spanish deposit institutions maintained the trend evidenced in the previous quarters. Compared with the first six months of 2017, consolidated income grew by 12.5% to stand at over €10 billion. The main determinant of this improvement was the continuing reduction in asset impairment losses, since the top half of the income statement continues to be influenced by narrow margins, in a setting of low interest rates. Activity, for its part, continues to decline, meaning that total consolidated assets fell slightly, standing 0.5% down on their June 2017 level. Credit to the resident private sector in Spain continues to contract (–2.9% compared with June 2017), affected by the fall in the volume of non-performing loans (NPLs), down 26.7% on June 2017. From their late-2013 peak, NPLs have fallen by over €114 billion, a decline of somewhat more than 60% since then, with an NPL ratio as at June 2018 of 6.4%, 7.5 percentage points, pp, down on its peak.

In strong contrast to the sluggish credit activity in aggregate terms, some segments of the business have grown strongly, as is the case of consumer credit for durable goods purchases. While the year-on-year growth rate of this type of credit (23% in June 2018 against 28% in March 2018 and 27% in December 2017) has slowed down somewhat, NPLs have quickened substantially (year-on-year growth of 22.6% in June this year).

In terms of solvency, the Common Equity Tier 1, CET1, ratio stood at the same level as in June the previous year, namely 11.9%. In this respect, the stress test by the European Banking Authority (EBA) and the in-house forward-looking assessment by the Banco de España show the considerable resilience of Spanish deposit institutions to a potential

adverse macroeconomic scenario. Although the capital ratio stands clearly above the regulatory minimum level, international solvency comparisons, both with the Banking Union countries and with the rest of the EU members, reveal that Spanish banks' capital ratios are low. This largely reflects the clean-up of bank balance sheets undertaken and the greater density of their assets (measured as the ratio of risk-weighted assets to total exposure). In any event, since 2014, when the higher-quality CET1 requirements came into force, Spanish banks have only increased this ratio by 30 basis points, bp. The need for Spanish institutions to adopt capital-strengthening strategies is therefore evident.

2 Risk factors

The main factors of risk to the stability of the Spanish financial system are identified below.

RISK FACTORS (a) TABLE 1

1	Compression of the deposit institutions' business margin in an environment of low interest rates, which increases the propensity to seek more profitable and riskier business alternatives.	
2	Possible increase in economic and geopolitical uncertainty and/or stepping up of trade tensions that may lead to a tightening of financial conditions at the international level in the form of risk premium repricing, impacting the value of financial assets and the sustainability of economic agents' debt.	
3	Subsequent deterioration in the emerging markets' economic and financial situation with a potential impact on the results of those financial institutions most exposed in these markets.	

SOURCE: Banco de España.

a The colour scheme in the table should be understood as follows: green denotes an absence of risk, yellow indicates low risk, orange, medium risk, and red, high risk. The time horizon for which these risks are defined is set by the FSR's frequency, i.e. half-yearly. The arrows indicates whether risk has recently increased, held stable or diminished.

These factors of risk evidence a high degree of interrelatedness, meaning that the materialisation of one may prompt the activation of another.

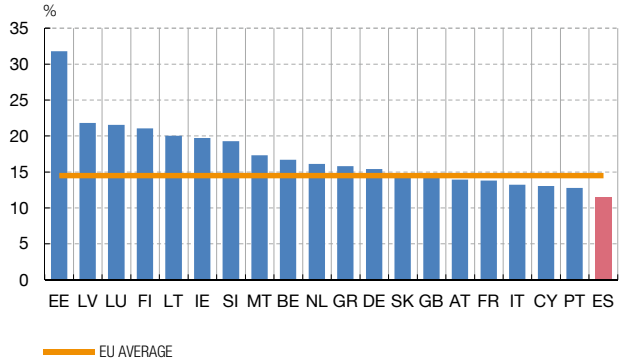
2.1 COMPRESSION OF MARGINS IN THE INCOME STATEMENT ENCOURAGING RISK-TAKING

Low interest rates and the developments in activity continue to influence Spanish deposit institutions' net interest margins, particularly in domestic business. The significant improvement in recorded impairment losses is what has enabled banks to continue increasing final income on their profit and loss accounts. This increase provides for the strengthening of their solvency levels so that these may draw closer to those of other euro area countries' institutions (Chart A).

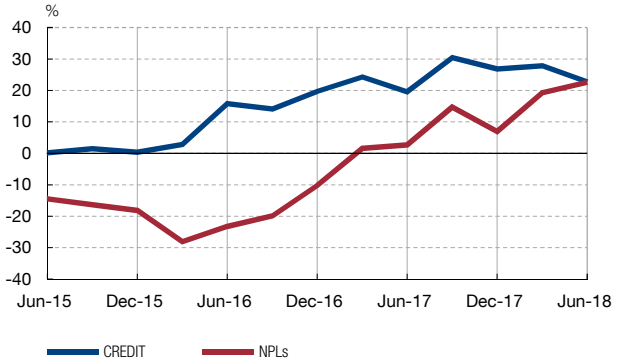
In addition to improving the relative position in terms of capital, the increase in the CET1 ratio is expected to contribute to compliance with the minimum requirement for own funds and eligible liabilities (MREL), which Spanish banks will have progressively to meet in the coming years.

In addition, partly as a result of developments in the demand for credit and of the search for more profitable business segments, there has been high-growth in consumer credit for durable goods purchases (Chart B). Very fast growth in credit usually entails a greater risk, although such risk takes some time to emerge. Indeed, NPL levels have recently increased, which will require banks to set aside additional provisioning accordingly, to review the sustainability of the pace of their growth in this business segment and to determine whether lending standards for new business are in line with the medium-term risk profile they desire for their credit portfolio.

A CET1 RATIO. EUROPEAN COMPARISON. SSM COUNTRIES AND UNITED KINGDOM
June 2018



B YEAR-ON-YEAR RATE OF CHANGE IN CREDIT FOR PURCHASE OF CONSUMER DURABLES AND IN THE RELATED NPLs
Deposit institutions



SOURCES: Banco de España and EBA.

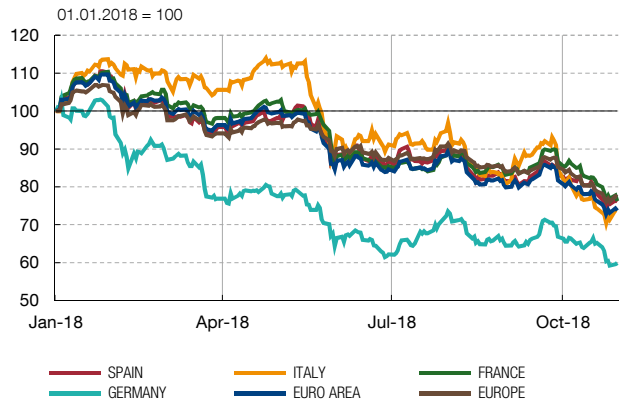
2.2 ECONOMIC UNCERTAINTY, GEOPOLITICS AND TRADE TENSIONS

The high degree of economic and political uncertainty and the upsurge in trade tensions pose a risk in terms of a potential worsening in financial conditions at the international level. The economic and fiscal situation in Italy, with no direct repercussions on the Spanish economy, so far, a further escalation of protectionist measures and a greater-than-expected hike in interest rates in the United States may prompt a greater tightening of financing conditions internationally with an ultimate impact on the financial position of households and firms and on sovereign debt, subsequently impacting banks adversely. Rising uncertainty in the past months has led to a negative market assessment with the subsequent correction in stock market prices (Chart C), and an increase in the cost of funding via increases in risk premia (Chart D). Additionally, within the European context, there is no clarity as to what the final outcome of the current Brexit negotiations may be. Exit by the UK from the European Union without an agreement could have an adverse economic impact on this country and, ultimately, on the firms located there, with potential consequences for the continuity of certain financial contracts. Compounding the foregoing domestically is the uncertainty over the future economic policy stance against the background of Spain's fragmented parliament and any potential rise in political tensions in Catalonia.

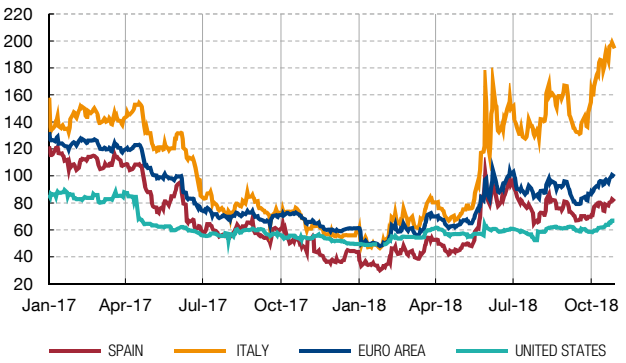
2.3 WORSENING OF THE EMERGING MARKETS' ECONOMIC AND FINANCIAL SITUATION

A heightening of the political and economic risks affecting the emerging economies in the current environment of slowing world trade caused by the protectionist tensions created, with a rather unfavourable scenario in terms of exchange rates and capital flows (Charts E and F), might directly affect the level of activity of the emerging countries and

C BANKING-SECTOR STOCK MARKET INDICES

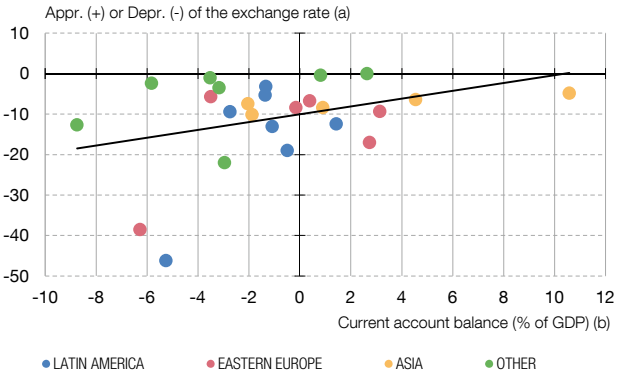


D PREMIA ON 5-YEAR BANK CDS

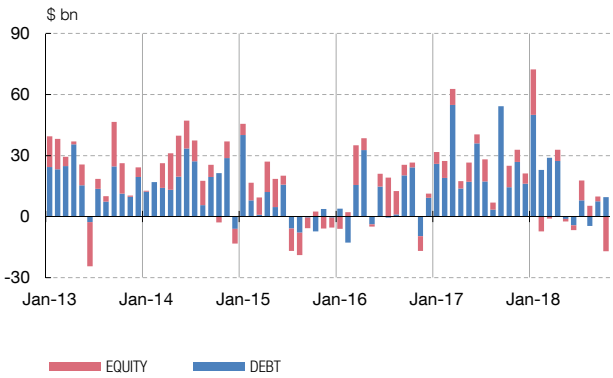


SOURCE: Datastream.

E EXCHANGE RATE DEPRECIATION AND EXTERNAL VULNERABILITY



F PORTFOLIO CAPITAL FLOWS TOWARDS EMERGING MARKETS



SOURCE: IIF.

a Depreciation from 1 April to 10 September 2018.
b Current account balance as a percentage of GDP in 2018 Q1.

ultimately result in a worsening of the financing conditions of banks engaging in activity in those countries.

Since the previous FSR, Turkey and Argentina, two countries with a high level of external financial dependency, have seen some of these risks materialise. That said, their idiosyncratic problems do not appear so far to have spread to other, bigger emerging economies to which the Spanish banking system is exposed.

Broadly, the risk to the generation of banking income may be said to have held stable against a background of economic activity that is still positive overall. Meanwhile, the other two risks (asset re-pricing and developments in the emerging economies) have recently increased, given the existing trade tensions and the economic and geopolitical uncertainty.

As usual, the risks discussed above are addressed in greater detail throughout this Report. It is sought to show their interrelatedness and impact on the financial system, in particular on the banking system, and their potential repercussion on credit risk, the most significant risk for Spanish deposit institutions, their income statement and their solvency position.

3 Macroprudential analysis and policy

Chapter 3 describes the macroprudential policy stance of the Banco de España in recent months. Along with the description and analysis of the systemic risks map and the macroprudential policy decisions taken on the basis of the main indicators used, this chapter presents some alternative models for assessing cyclical systemic risk (Box 3.1). These models could be used as a complement for informing decisions on the level of the countercyclical capital buffer (CCyB), which at present is guided by the credit-to-GDP gap and which evidences certain methodological issues that are accentuated in countries that have recently experienced a very pronounced credit cycle, as is Spain's case.

1.1 Financial markets

Global financial conditions have tended to tighten, especially in the emerging economies under the influence of money market normalisation in the United States

Since the previous FSR published in May 2018, some tightening of global financial conditions has been witnessed, this being of greater intensity in the emerging market economies (EMEs). These developments have mainly been influenced by the normalisation of US monetary policy and by the resurgence of trade tensions. In Europe, other factors negatively impacting financial conditions have been the political uncertainty in Italy and the lack of headway in Brexit negotiations (Chart 1.1.A). Until the end of September, US stock market prices held up favourably despite the slight intensification of the ongoing monetary policy normalisation and the growing threat of protectionism. Market indices hit new highs, led in particular by the technology firms' share prices. However, in October the US stock market indices showed sharp falls and heightened volatility owing to rising long-term interest rates and worsening business profit projections, which were influenced by heightened protectionism.

US monetary policy normalisation and the expansionary stance of its fiscal policy were reflected in a generalised strengthening of the dollar. The US currency appreciated against the euro, the yen and sterling, and also against virtually all EME currencies, whose depreciations against the dollar were in excess of double figures in Turkey, Argentina and Brazil (Chart 1.1.B). US 10-year government bond yields stood above 3% at the cut-off date of this Report (Chart 1.1.C). Despite this, the US yield curve continued to flatten, something which has occasionally been interpreted as a leading indicator of future recessions (see Box 1.1). In any event, corporate debt spreads have held relatively stable, and those of riskier corporations are greatly below their historical average (Chart 1.1.D).

The deterioration in conditions on the emerging markets has been particularly marked in Argentina and Turkey …

Conditions in most EMEs worsened, especially from April, influenced by higher US interest rates, the weakening of their currencies against the dollar and growing trade tensions. The countries most affected were those with bigger external deficits and greater foreign currency funding needs, Argentina and Turkey among them (Chart 1.1.E). In recent months there have been two major bouts of volatility: the first was in June following the announcement of new US tariffs on Chinese goods; and the second in late July, given the further deterioration in the EMEs following the heavy depreciations of the Argentine and Turkish currencies. This instability in the EMEs also translated into a brake on net capital inflows (Chart 1.1.F).

… which adversely impacted the share prices of the European banks exposed to these economies

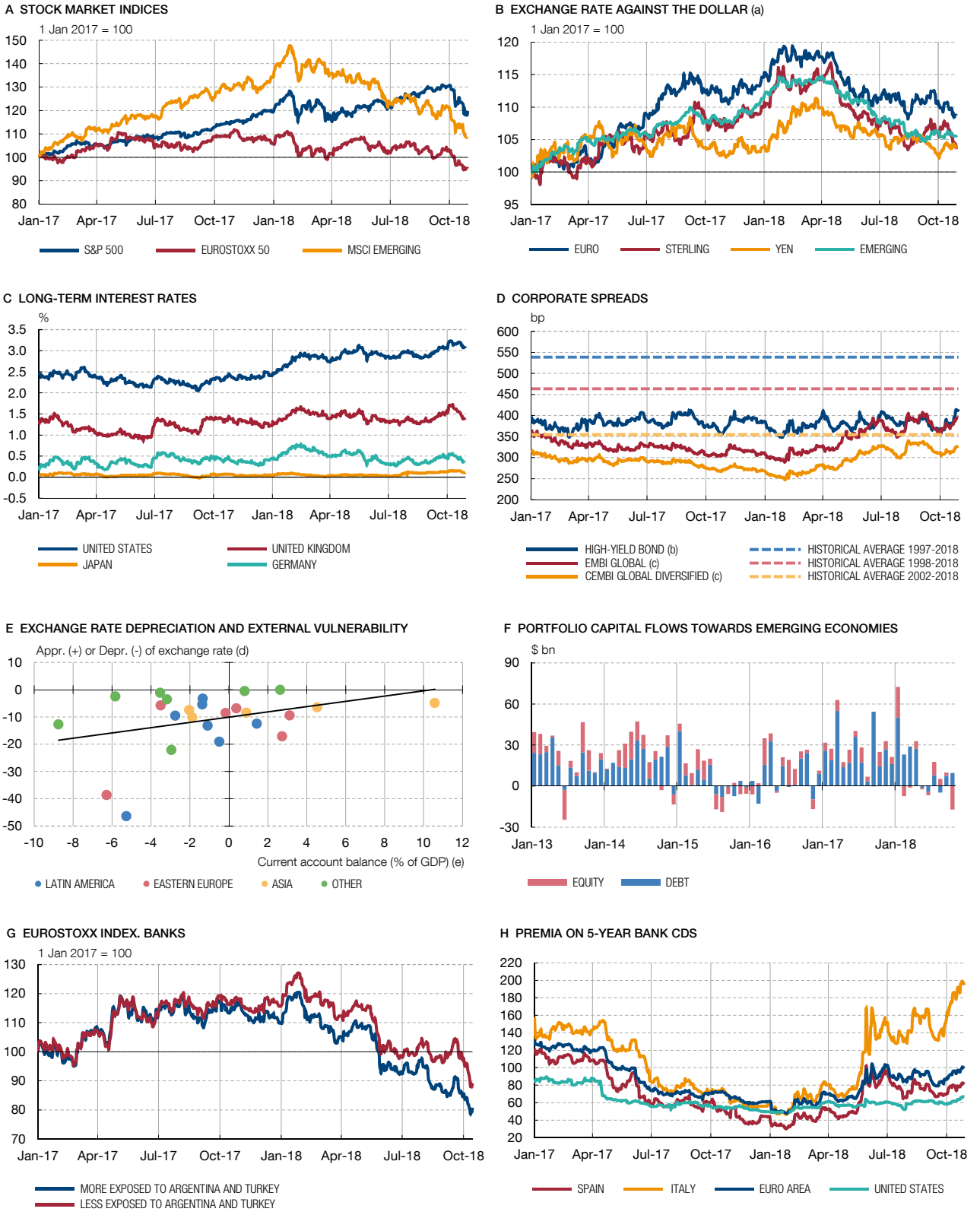
European banks were also negatively affected by the turbulence in the EMEs. Hence, the share prices of the European banks most exposed to these countries fell with greater intensity from late July to the first week of September, compared with the share prices of those banks less exposed (13.5% against 8.1%, Chart 1.1.G). Despite the strong deterioration in the Argentine and Turkish economies, the contagion from this turbulence, both to the other emerging and developed economies alike, appears to be contained for the moment.

The political uncertainty in Italy has prompted a strong rise in Italian government debt and bank bond yields, without spreading to the rest of the euro area

The uncertainty over economic and fiscal policy in Italy had an adverse impact on this country's financial markets, chiefly taking the form of strong rises in general government debt yields (see Chart A of Box 1.2) and of notable – albeit more moderate – increases in the case of bank bonds (see Chart 1.1.H). These movements have so far had a limited impact on financial markets in Spain and in the rest of the euro area countries (see Box 1.2). Another factor of uncertainty concerns Brexit. Exit by the UK from the European Union without an agreement could have an adverse economic impact on this country and, ultimately, on the firms located there, with potential consequences for the continuity of certain financial contracts.

FINANCIAL MARKET INDICATORS

CHART 1.1



SOURCES: Datastream, JP Morgan and IIF.

a Values higher than 100 denote depreciations of the dollar relative to 1 January 2017.
b Corporate bond spread: "B"-graded Merril Lynch bond versus US 10-year Treasury bond.
c EMBI (Emerging Markets Bond Index) Global and CEMBI (Corporate Emerging Markets Bond Index) Board Diversified are indices prepared by JP Morgan. The EMBI measures the country-risk of the group of emerging countries and represents the spread of the emerging countries' sovereign debt yield in dollars over the US sovereign debt yield. CEMBI measures the corporate risk of the group of emerging countries and represents the spread of emperging countries' corporate debt yield in dollars over US corporate debt yield.
d Depreciation from 1 April to 10 September 2018.
e Current account balance as a percentage of GDP in 2018 Q1.

In 2018 to date, a flattening of the yield curve has been observed in the United States, whereby the spread between 10-year and one-year Treasury yields has narrowed to below 100 bp (Chart A). This phenomenon has been scrutinised by analysts, since frequently economic crises have been preceded by an inversion of the yield curve (i.e. when the spread between long-term and short-term rates turns negative).[1] Indeed, both the 2001 and 2008 crises came about following such inversions of the curve. Although the debate among experts has been centred on the United States,[2] in the euro area, too, this spread is narrow, given the area's current cyclical position, especially in the case of the best-rated issuers, such as Germany, although it has been relatively stable since 2015.

However, there are differences in how the low levels of the slope of the yield curve have been reached in both economic areas. These are essentially linked to divergences between the respective monetary policies, with a progressive tightening in the former case and an accommodative stance in the latter. Thus, in the case of the United States, the 10-year rate has been oscillating between 2% and 3% since mid-2011, with a slight rise over the past year, which has drawn rates above 3.1%. The ongoing progressive normalisation of the Federal Reserve's monetary policy has led the one-year rate to rise significantly from the levels close to 0% observed in 2014 to over 2% recently (see Chart B). The result of long-term interest rates at relatively low levels —given the euro area's current cyclical position — and short-term interest rates on a rising trend has led the spread between both to stand below 50 bp for the first time since 2007.[3]

In the euro area, the short-term rate has been at levels close to or below zero since 2012 and there has been no rising trend in the recent period; unlike the Federal Reserve, the European Central Bank has so far maintained a very accommodative monetary policy stance. In Europe's case, the spread between long and short-term rates has been compressed as a result of the decline in yields at the long end of the curve. The German benchmark rate, which was already at historically low levels of around 2% in 2012 and 2013, fell further as from early 2014, coinciding with the stepping up of the expansionary monetary policy that led bond yields to figures below 0.5% (see Chart C). Further to these developments, the slope of the yield curve in Germany is currently, as in the United States, below its historical average since 2001.

To analyse the implications of the low level of the yield curve slope in the two geographical areas, it is useful to separate long-term rates into two components. Hence, the 10-year bond yield reflects, on one hand, market expectations about the average level of short-term rates over the next 10 years; and, on the other, a term risk premium that compensates its holders for the risk of holding until maturity a security whose market value is subject to the changes that may occur in interest rates. As these two variables are not observable, an estimate must be made. This Box presents the results of this breakdown based on an extension of a standard approach in which expectations are allowed to change over time.[4]

Chart D shows the results of the estimates for the United States and Germany. As can be seen, term risk premia have fallen considerably in the past two decades in both economies, standing at present at low figures in historical terms. The pattern is parallel in Germany and the United States in much of the sample. The main divergences are from end-2013, when the Federal Reserve announced the start of its tapering of asset purchases, and the ECB embarked on a new phase of its expansionary monetary policy (TLTRO and APP), which would mark the beginning of the monetary policy divergences between the two areas. At present, it is estimated the level of the term risk premium will be close to zero in Germany and around 120 bp in the United States, further removed from its historical average in the former case than in the latter.

1 Estrella, A., and F. Mishkin (1997), «The predictive power of the term structure of interest rates in Europe and United States: implications for the European Central Bank», European Economic Review, 41, 1375-1401.

2 These developments in the United States have led to a debate between economists and members of the Federal Reserve about the possible inversion of the curve. Thus, for example, Neel Kashkari, president of the Federal Reserve Bank of Minneapolis, pointed out in July that the Federal Reserve should not continue raising the benchmark interest rate so as to prevent a possible inversion of the curve. J. Bullard, president of the Federal Reserve Bank of St Louis, had positioned himself along these same lines late last year (www.stlouisfed.org/~/media/Files/PDFs/Bullard/remarks/2017/Bullard_Little_Rock_AR_1_December_2017.pdf). However, Ben Bernanke warned about the danger of erroneously interpreting the inversion of the curve, since according to his judgement, this would not be related to the future course of monetary policy (www.ft.com/content/e72fdf28-8a1c-11e8-bf9e-8771d5404543). The Chairman of the Federal Reserve, Jay Powell, stated that monetary policy would not be altered on the basis of the slope of the yield curve, and that what was really relevant was the information that may be obtained from it about the long-term neutral rate of interest.

3 See "The flattening of the yield curve in the United States», Analytical Articles, Banco de España, March 2018. https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/InformesBoletinesRevistas/ArticulosAnaliticos/2018/T1/Files/beaa1801-art6e.pdf.

4 In the academic literature, the usual approach for this separation is based on a dynamic equation of the factors comprising the yield curve in order to obtain interest-rate expectations, and on an associated risk price equation, that enables term risk premia to be derived. One of the main problems with these models is that the standard dynamic equations usually lead to expectations that are lacking in credibility, since they scarcely change over time. To avoid this, this Box uses an approach which provides for some persistence over time in respect of expectations, similar to that in the approach by Abbritti, M., Gil-Alana, L.A., Lovcha, Y. and Moreno, A. (2015). «Term structure persistence». Journal of Financial Econometrics, 14(2), 331-352. For this breakdown, expectations are obtained from an ARFIMA model on the yield term components (long-term level and slope). These models, which are a generalisation of the more usual ARIMA models in the literature, are characterised by their possessing great persistence, or «long memory», evidencing an autocorrelation function that declines more slowly than «short memory» processes such as the ARIMA. That allows expectations to change over time, something which is very difficult to capture with the usual models.

Regarding the second component (long-term interest rate expectations), in both areas the estimated values also show that currently values are low in light of the cyclical position of these economies, which is compatible with the literature on the low natural rate of interest that would be linked to the low potential growth of the advanced economies.[5] In the case of the United States, despite the fact that the rate hikes by the Federal Reserve have raised in the past two years these expectations to above their historical

5 See G. Fiorentini, A. Galesi, G. Pérez-Quirós and E. Sentana (2018) «The rise and fall of the natural interest rate». Banco de España Working Paper no. 1822.

Chart A
SPREAD BETWEEN 10-YEAR AND 1-YEAR RATE (a)

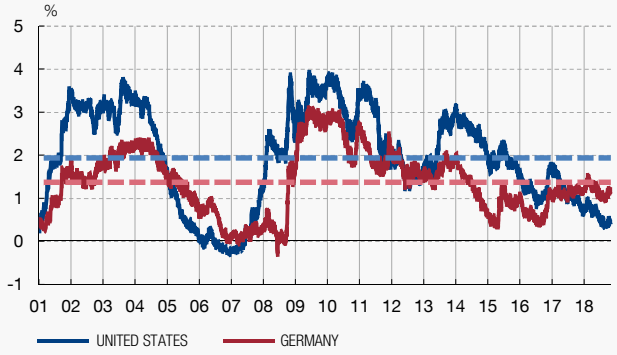


Chart B
INTEREST RATES. UNITED STATES (a)

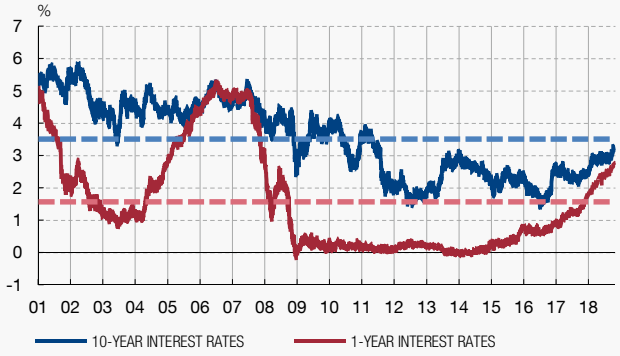


Chart C
INTEREST RATES. GERMANY (a)

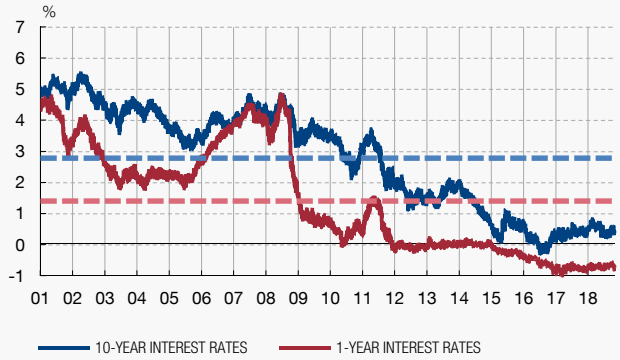


Chart D
ESTIMATED TERM RISK PREMIUM (a) (b)

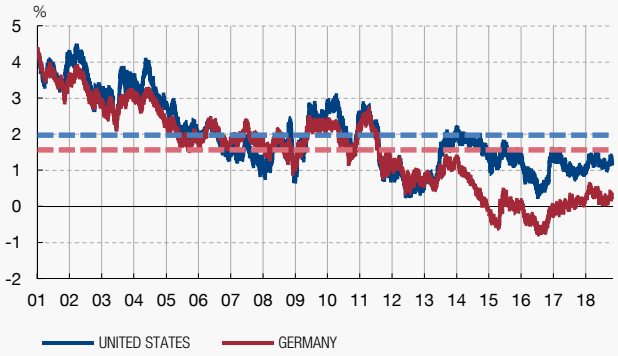


Chart E
INTEREST RATE EXPECTATIONS. UNITED STATES (a)

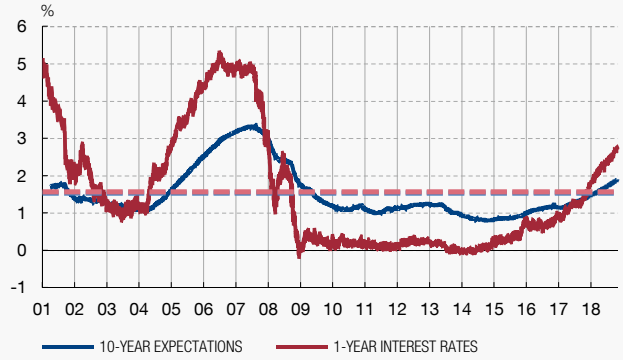


Chart F
INTEREST RATE EXPECTATIONS. GERMANY (a)

SOURCES: Bundesbank, Federal Reserve and Banco de España.

a The dotted lines represent the averages of the respective time series for the period shown in the chart. The interest rates shown are the zero-coupon rates for each term estimated by the Bundesbank and the Federal Reserve, respectively.
b Risk premia are obtained from a decomposition of 10-year interest rates into term risk premia and expectations about short-term interest rates. Expectations are obtained by predicting the instantaneous short-term interest rates using an ARFIMA model on each of the components of the yield curve (long-term level, slope and curvature) estimated daily. Once the short-term rate expectations are obtained, the premia can be had taking the difference between 10-year rates and short rate expectations.

average, such expectations were currently below that benchmark rate (Chart E). In Germany, these expectations have continued falling in the recent period, according to these estimates, reaching levels considerably below the historical average (Chart F).

To conclude, what this breakdown of 10-year rates would be indicating is that both term risk premia and long-term interest rate expectations are at historically low levels, especially in the euro area. In both cases, this might have implications for financial stability. Hence, long-term rates in these economies might rise if, first, there were a normalisation of term risk premia, associated with risk repricing by agents or unexpected changes in the portfolios of central banks (which are one of their main holders), which would lead term risk premia to rise to levels more similar to those observed in the past; or if current expectations about the future course of short-term rates were to be revised upwards. This rise might have consequences, owing to the negative impact on investor portfolios and on agents' financing conditions and investment decisions (for which long-term rates are a very significant factor).

The ECB announced the end of the asset purchase programme for December 2018

In the monetary policy arena, the September ECB Governing Council confirmed the June announcement on the finalisation, at the end of this year, of the asset purchase programme (APP), provided that the medium-term inflation outlook holds. In particular, it decided to reduce in October the monthly pace of net asset purchases from the current level of €30 billion per month to €15 billion, with this pace being maintained until December 2018 to then cease in January 2019. The Council stipulated, moreover, that once net purchases have concluded, it will continue reinvesting the ensuing maturities in its APP portfolio over a prolonged period of time after the net asset purchases finalise and, in any event, for as long as proves necessary to maintain favourable liquidity conditions and a broad degree of monetary accommodation. Further, the Council did not expect short-term changes in policy interest rates, which would hold at current levels until at least the summer of 2019.

The materialisation of certain risks might translate into a significant tightening in global financial conditions

Neither the ECB's announcements nor the continuation of the monetary policy normalisation process by the US Federal Reserve have had significant effects on US and euro area financial markets, in a setting in which both term premia and expected long-term interest rates are holding at historically low levels (see Box 1.1). Against this background, rises in long-term yields both in the United States and the euro area cannot be ruled out; these could be triggered either as a result of a normalisation of term risk premia or of unexpected changes in monetary policies, although this latter scenario seems less likely given central banks' communication policies. Under any of these scenarios the rise in the cost of financing for private issuers might be even more marked given the low level of credit premia. Moreover, credit risk premia might rise if certain short-term risks materialise, such as an escalation in trade tensions, a more marked downturn in EMEs or specific political or geopolitical risks. The materialisation of any of these risks might also adversely affect financial and non-financial institutions' share prices either through their impact on the discount factor or through the rise in stock market risk premia.

Financial conditions in the EMEs might worsen as a result of a fresh escalation in protectionist measures or of greater than expected rises in US interest rates. Although these economies as a whole appear less vulnerable than in the past, some have built up certain risks in recent years, in particular on account of greater external indebtedness by their non-financial private sectors.

The general elections in Italy on 4 March led to a fragmented parliament in which the political parties critical of the European Union (EU) and, in particular, of Economic and Monetary Union, increased their share of the vote. This resulted in a period of instability on the Italian financial markets as from mid-May, when the complex post-electoral negotiations culminated in a government pact between the Northern League and the Five-Star Movement. The agreed government programme entailed, among other elements, fiscal expansion plans[1] difficult to square with the commitments undertaken under the Stability and Growth Pact (SGP), although the campaign promises most clearly at odds with the basic tenets of the European project were sidestepped.

In August, the start of the 2019 budget negotiations confirmed the complexity of the Italian political landscape. The doubts over the country's fiscal outlook prompted a fresh bout of financial instability, which flared again in October following the confirmation that the draft budget does not observe the limits of the SGP and poses a new political and economic challenge for the European Union. The budget submitted to the EC includes a public deficit of 2.4% for 2019 – against 0.8% in the April Stability Programme – and deviates notably from the Council's July 2018 recommendations regarding the adjustment of the structural budgetary balance.[2] Moreover, the foreseeable macroeconomic scenario, which includes a 1.5% increase in GDP in 2019, does not have the backing of the Italian independent fiscal council and is considered optimistic, which also adds a risk in respect of the path of reduction for public debt, which is currently at a very high level of 130% of

1 The central elements of this expansion were the reduction in income tax and the introduction of a minimum income. The agreement also envisaged a reduction in contributions to the European budget and the reversal of the 2011 pension system reforms. This fiscal expansion will be funded in part by the issuance of the so-called mini-BOTS, small-denomination securities that could subsequently be used in other transactions and that could be the embryo for a parallel currency.

2 The measures include a minimum income scheme (somewhat less generous than initially planned), a reduction in income tax and backtracking on the recent pension reform, facilitating early retirement.

Chart A
YIELD ON ITALIAN SOVEREIGN DEBT

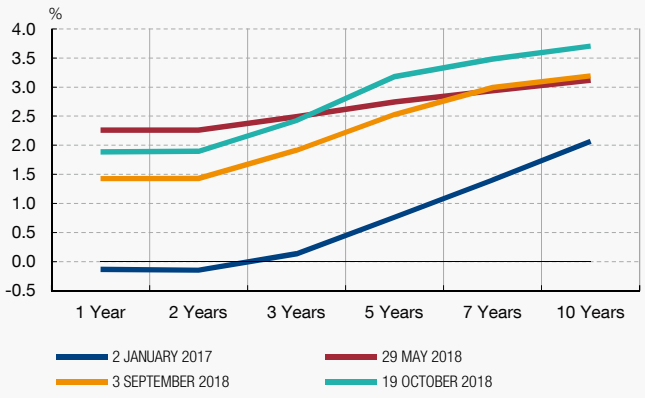


Chart B
ITALY. BALANCE OF PAYMENTS. PORTFOLIO INVESTMENT (a)

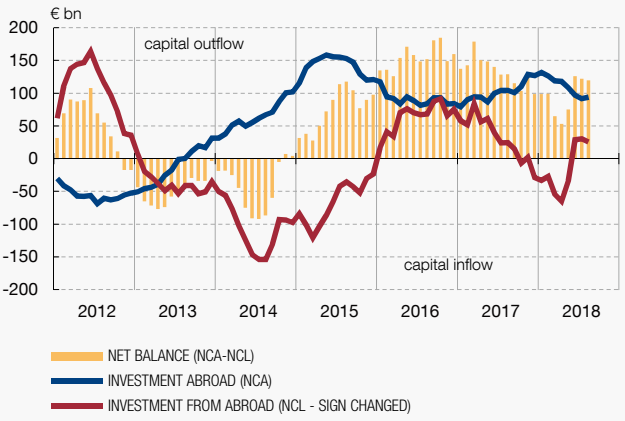


Chart C
ITALIAN BANKS' ACQUISITIONS OF DOMESTIC PUBLIC DEBT

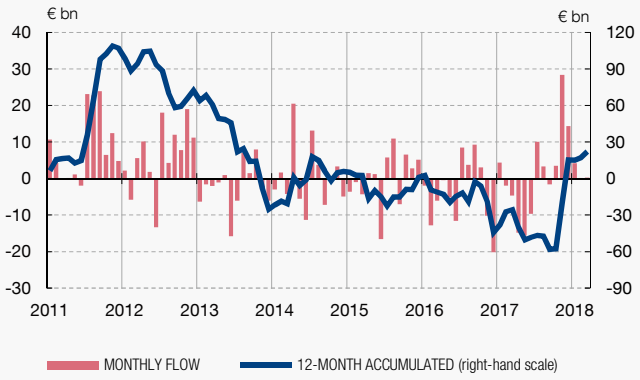
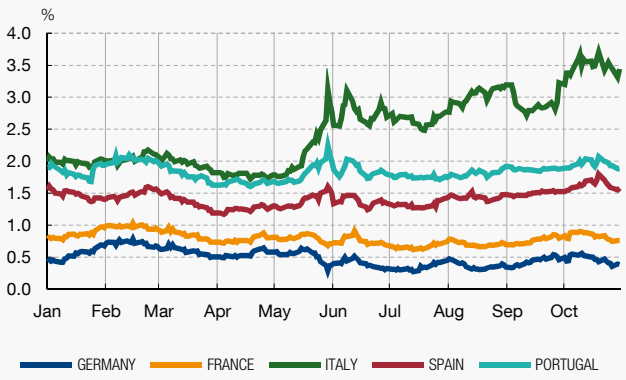


Chart D
10-YEAR SOVEREIGN YIELDS



SOURCES: ECB, Thomson Reuters and Banco de España.

a NCA and NCL denote the net change in assets and the net change in liabilities, respectively. The portfolio investment account in net terms is calculated as assets minus liabilities, such that a positive (negative) sign entails a net outflow (inflow) of funds.

Chart E
SENSITIVITY OF SOVEREIGN RISK (BANK RISK) TO BANK RISK (SOVEREIGN RISK) (a)

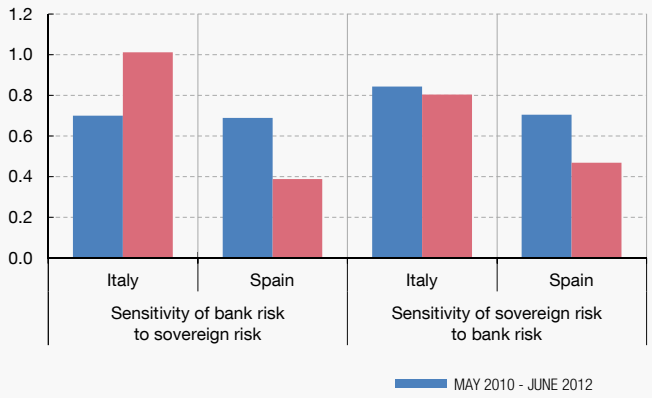
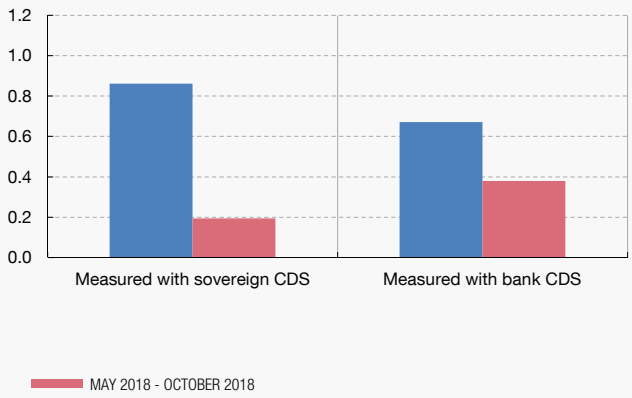


Chart F
SENSITIVITY OF SPANISH RISK TO ITALIAN RISK (b)



SOURCE: Banco de España.

a The contagion measure reflects the sensitivity of one sector's risk to more extreme negative events of the other sector in the same country, and it entails an extension of the Marginal Expected Shortfall (MES) concept. Hence, the measure of the Italian banking sector's sensitivity to what occurs in the Italian sovereign is defined as a ratio. The numerator is the average daily change in Italian banks' CDS index (in basis points) on the days on which the biggest increases in the Italian sovereign CDS premium take place during the business days of the related period of time (those on which the change in the sovereign CDS is above the 90th percentile of the distribution of the daily change in the latter for that period). And the denominator is the average of the daily change in the sovereign CDS premium on those same days. The contagion measure is calculated for the recent period of turbulence in Italy (May 2018 - October 2018) and also for the sovereign debt crisis period (May 2010 - June 2012). In Chart E, the first two sets of bars show the sensitivity of the premium of Italian and Spanish bank CDS to these countries' sovereign CDS. The third and fourth set of bars refer to the sensitivity of the Italian and Spanish sovereign CDS premia, respectively, to these countries' banking sector. The contagion measure is relative to risk developments in the starting sector (denominator), whereby values close to one indicate that changes in the premia of the two sectors are on a similar scale. Values that are positive but close to zero indicate that the CDS premia move in the same direction, but the increase in the premia of the starting sector (denominator) is far higher than that of the exposed sector (numerator).

b The contagion measure is based on the sensitivity of Spain's sovereign and bank risk to the more extreme negative events of the same sectors in Italy. The contagion measures in this chart are a variation on the sensitivity measures in Chart E.

GDP. Given these circumstances and for the first time ever in the history of the EU, the EC rejected the Italian budget and requested that a new draft budget be submitted within three weeks.

With perspective, the events in recent months illustrate the interaction between increased political uncertainty, on one hand, and, on the other, the fundamental vulnerabilities of the Italian economy (low economic growth and high public debt). Investors' perception of higher risk has been reflected in a worsening in financial conditions which private and public agents alike must face.

In the case of public debt, there has been an increase in volatility and a marked decline in prices. The 10-year interest rate on Italian debt, which had held relatively stable at around 2% since the start of the year, began to climb in mid-May, exceeding 3% at the end of that month and again in August. The recent rebound has taken it to a high of 3.7% on 19 October, entailing a spread over the German Bund of over 300 bp, the highest level since mid-June 2013. The response by short-term interest rates has also been sharp. The yield on two-year debt, which started from negative figures, rose to over 2% in late May and 1.4% in August. With the latest tensions it has climbed once more to a level of close to 2% (see Chart A). The perception of greater credit risk on the sovereign debt has also entailed a downgrade (by a notch to Baa3 on the part of Moody's) and the emergence of a country-risk component in financing costs for the other agents in the economy, especially those whose activity is concentrated in Italy.

The context of greater perceived risk has also given rise to capital outflows, mainly through sales of public debt securities. As Chart B shows, the Italian economy has since 2015 seen net capital outflows in securities transactions. These flows were the outcome of investments in foreign assets by Italian sectors, and of Italian public debt securities sales by non-residents within the framework of the ECB's public securities purchase programme (PSPP). However, the instability following the elections saw capital outflows step up over the most recent period through non-residents' sales of Italian securities, especially public debt instruments, which amounted to €24.8 billion and €33 billion in May and June, respectively.

These movements were offset by net domestic public debt purchases by Italian banks totalling more than €47 billion between May and September, proving particularly high in May (€28 billion) and in June (€14 billion). As illustrated in Chart C, banks interrupted the tendency towards the divestment of domestic public debt holdings. The value of this portfolio amounted to around €380 billion in September. According to the information on Italian public debt holders, Italian bank holdings accounted for 19.7% of outstanding public debt securities in July[3], compared with 17.4% in April.

3 In relation to other holders, in July 33.8% of outstanding Italian public debt securities were in the hands of non-residents (36.9% in April), 19.3% on the central bank balance sheet (19.1% in April), 22.6% in the hands of non-bank financial institutions (21.6% in April) and 4.6% were held by the non-financial resident sector (4.9% in April).

The turbulence on sovereign debt markets likewise had repercussions for Italian banks, which were also affected by the materialisation of risks in certain emerging economies, thereby reinforcing the link between sovereign and bank risk. As Chart 1.1.H in the main text illustrates, Italian banks saw the risk premium on their bonds increase, along with a significant correction in their stock market prices, chiefly during the second half of May. Chart E shows the degree of interaction between sovereign and bank risks between Italy and Spain for the recent period of turbulence and compares it with that observed during the euro area sovereign debt crisis period. There is thus a high degree of sensitivity[4] of Italian banks' CDS premia to the most negative sovereign-related events in that country since late May 2018, and such premia stand far above the values relating to the sovereign debt crisis. Moreover, the level is close to 1, suggesting that the changes in the bank CDS premium are on a similar scale to those in the sovereign CDS premium. This effect is bidirectional in Italy's case, since a high sensitivity of sovereign CDS premia to a worsening in bank CDS is also detected, although the intensity appears to be less and is at a level close to that observed during the sovereign debt crisis. However, the interaction between bank and sovereign risk in Spain has remained low, appreciably below what was seen in the sovereign debt crisis.

The tensions in financial conditions in Italy have, so far, had limited repercussions on the markets of other euro area countries, as evidenced by the moderate increase in other sovereign bond yields. Spanish and Portuguese 10-year government bond yields rose in late May to 1.6% and 2.2%, respectively, levels that have once more been reached (exceeded in the Spanish case) during the renewed tensions in October and which are 20-30 bp up on the level prior to the Italian elections (see Chart D). Chart F offers the same message, showing the sensitivity of the indicators of Spanish sovereign and bank risk to changes in the same risk indicators in Italy. The degree of sensitivity of Spanish sovereign CDS premia to changes in the related premia in Italy has thus been relatively low during the recent period of turbulence on the Italian sovereign debt market and far below the levels observed during the sovereign debt crisis in the euro area. The sensitivity of Spanish bank CDS to the changes in bank risk in Italy has been somewhat higher but also lower than that witnessed during the sovereign debt crisis.

In sum, the sensitivity of Italian financial markets to the increased political uncertainty as from May reveals once more that high debt levels against a background of low economic growth are a notable source of vulnerability. Italy is the third euro area economy in terms of GDP size, and although the signs of transmission to other euro area economies, including Spain, have been limited so far, it cannot be ruled out that further bouts of political uncertainty or uncertainty over the Italian fiscal situation might have more significant adverse effects in the future, especially in the current setting of economic deceleration and heightening global risks.

4 See the footnote to Chart E for a detailed description of the indicator.

On the developed economies' markets, this adjustment in financing conditions would affect the more indebted segments more, as is the case with certain companies with a low credit rating or with public-sector corporations in some countries. Funding conditions for the European banks most exposed to the EMEs might be particularly affected by any future worsening in these economies. More generally, funding conditions for the European banking sector might also worsen as a result of a potential increase in political uncertainty in Italy or of a lack of agreement on Brexit.

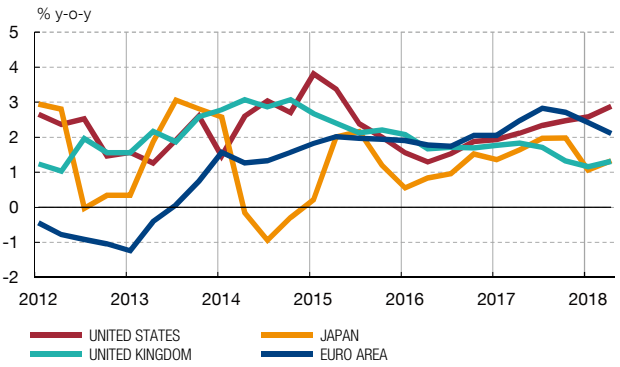
1.2 The macroeconomic environment

1.2.1 THE MACROECONOMIC ENVIRONMENT OUTSIDE THE EURO AREA

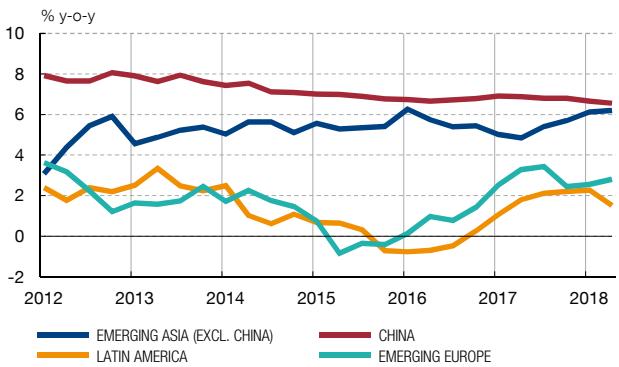
Growth in the global economy might have peaked in the summer months...

After some weakness in economic activity in 2018 Q1, the following quarter saw a sounder expansion in the global economy, although it was less balanced owing to the diverging paths of the advanced and emerging economies (Charts 1.2.A and 1.2.B). Specifically, growth in the advanced economies as a whole remained robust, especially in the United States, where GDP expanded at an annualised quarterly rate of 4.2%, underpinned by the fiscal expansion and the soundness of private demand. In Japan and the United Kingdom activity quickened, while in the euro area it remained less dynamic than in 2017. In the emerging economies, activity in Q2 turned generally less favourable as net capital outflows, currency depreciations and tighter financial conditions all materialised, bearing down on the countries considered most vulnerable (such as Argentina and Turkey). In Asia, Chinese GDP growth eased slightly to 6.7% year-on year, owing partly to the escalation of the trade war with the United States. In Latin America,

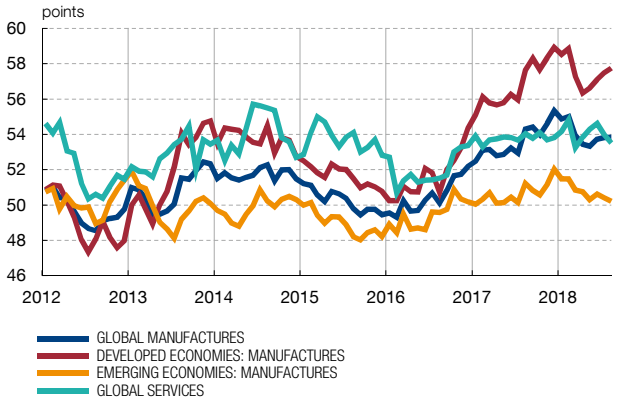
A YEAR-ON-YEAR GDP GROWTH IN THE ADVANCED ECONOMIES



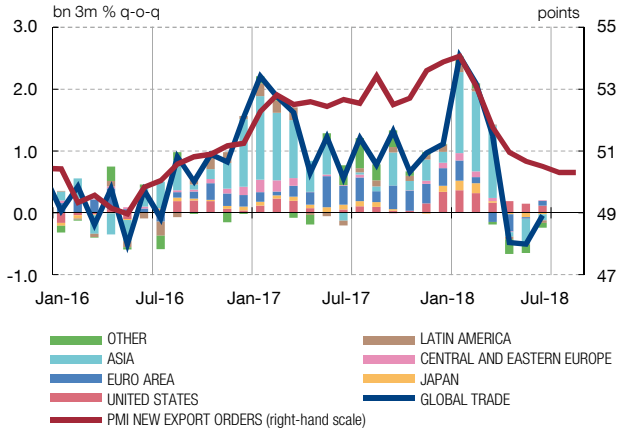
B YEAR-ON-YEAR GDP GROWTH IN THE EMERGING ECONOMIES



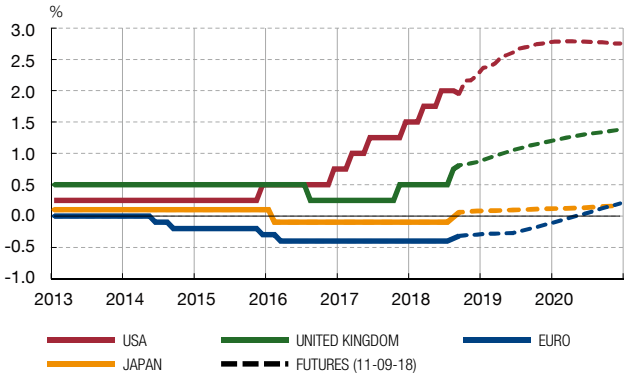
C GLOBAL PMI



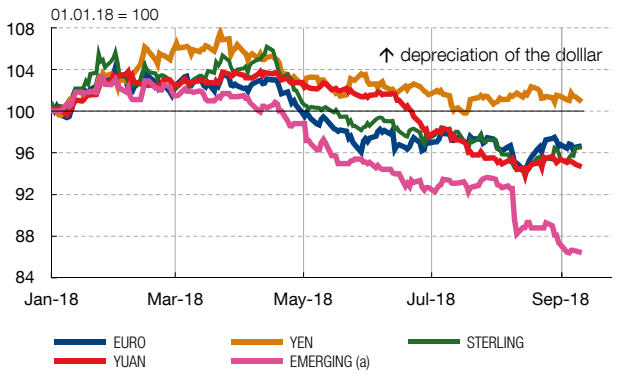
D CONTRIBUTION TO TRADE GROWTH



E OFFICIAL INTEREST RATES. ADVANCED ECONOMIES



F EXCHANGE RATES AGAINST THE DOLLAR



SOURCES: Datastream, IHS Markit, CPB and JP Morgan.

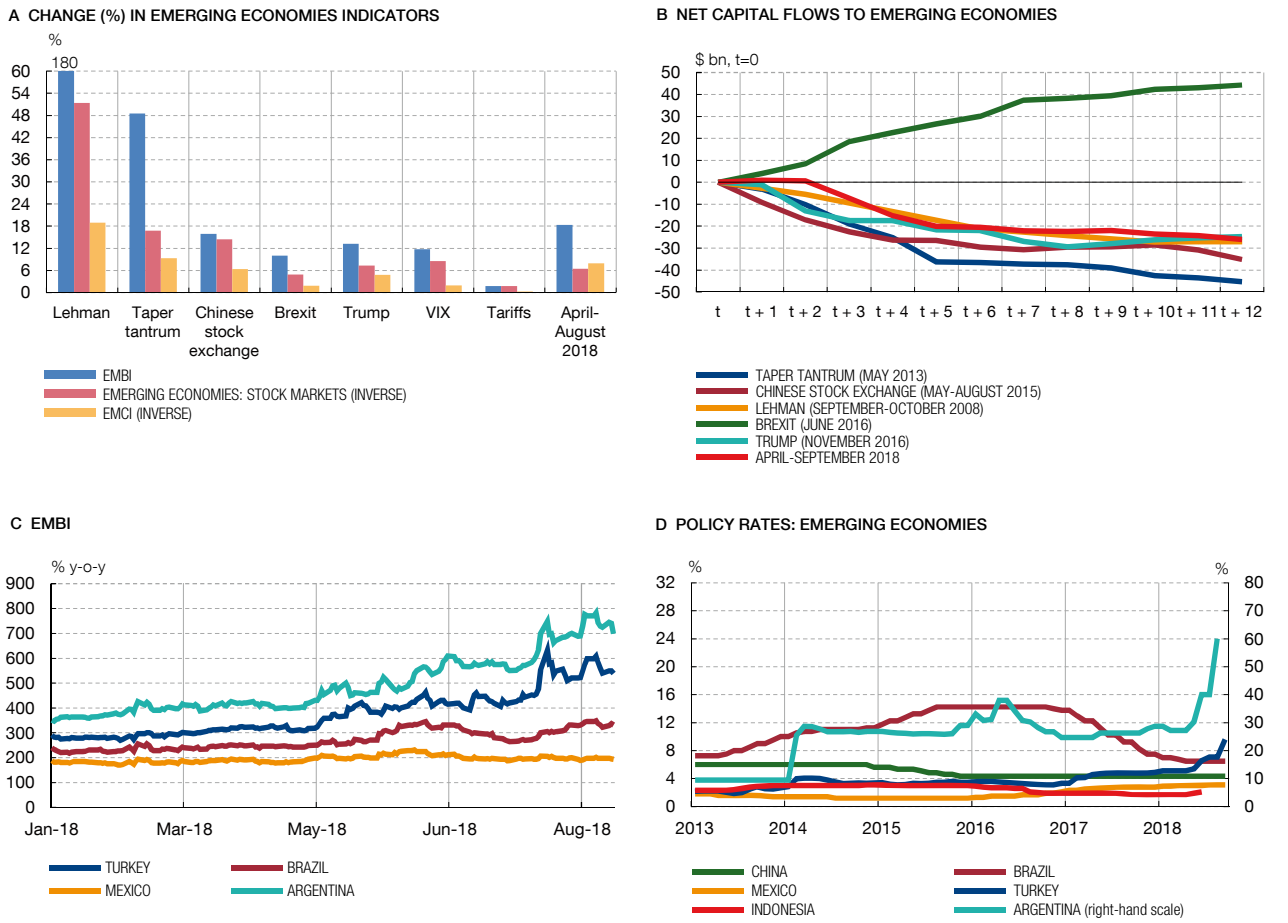
a JP Morgan EMCI index.

GDP contracted in Argentina and Mexico, although in the latter economy this appears to be somewhat more transitory.

The latest indicators show that trade tensions and the tightening financial conditions in some emerging economies have started to adversely affect global activity (Chart 1.2.C) and especially trade (Chart 1.2.D). Accordingly, a progressive slowdown in activity is foreseeable until it converges on a potential growth path lower than that before the crisis.

EMERGING ECONOMIES INDICATORS

CHART 1.3



SOURCES: Datastream and Global Market Monitor (IMF).

... with downside risks associated with the tightening financial conditions and with the increase in trade tensions

The risks to the baseline scenario are tilted to the downside, owing to a possibly sharper than expected tightening in financial conditions and a heightening of trade tensions. Further, these risks might be interrelated, with some triggering others. For example, the normalisation of US monetary policy (Chart 1.2.E) and the subsequent exchange rate appreciation might worsen the current account balance, which is precisely what President Trump is seeking to correct with his tariff-raising policy (Chart 1.2.F). Likewise, the uncertainty associated with the trade tensions might increase risk premia, tightening financial conditions.

The emerging economies are facing a tightening of financial conditions, albeit with some differentiation depending on idiosyncratic factors

The bout of turbulence in the EMEs last summer was the most negative episode seen since May 2013 in terms of currency depreciations and stock market declines (Chart 1.3.A), but not of net capital outflows (Chart 1.3.B). As earlier stated, the markets have discriminated among the emerging economies depending on their vulnerabilities. In this respect, the case of Mexico is significant, as its currency appreciated against the dollar as from mid-June following the favourable prospects of a new trade agreement being signed with the United States in place of NAFTA (Chart 1.3.C), although it depreciated towards the end of the reporting period following the halting of work on the capital's air transport infrastructure. In the case of other emerging economies, the authorities have reacted to this new environment. Some central banks, mainly in Asia (the Philippines, Indonesia and India) but also in the Czech Republic and Chile, raised their policy interest rates to some extent; others, such as Hong Kong, intervened on the foreign exchange

markets (Chart 1.3.D). Also, the Turkish government unveiled a Medium-Term Economic Programme (for the period 2019-2021) containing some restrictive fiscal measures.

In the opposite direction, the Chinese authorities eased financial conditions (lowering reserve requirements and injecting liquidity), they reintroduced the countercyclical factor to temper exchange rate oscillations and they raised the cost of holding short foreign currency positions so as to combat the depreciation of the Chinese currency. Notwithstanding, trade tensions with the United States are making themselves felt in the form of a diminished dynamism of activity. For this reason, the authorities have also announced some fiscal expansion plans. Specifically, corporate and income taxes have been cut, and local governments have been advised to accelerate the issuance of special bonds to guarantee the funding of investment spending on infrastructure. That might check the ongoing correction of imbalances and the transition to a new growth model which the Chinese authorities had considered to be a priority.

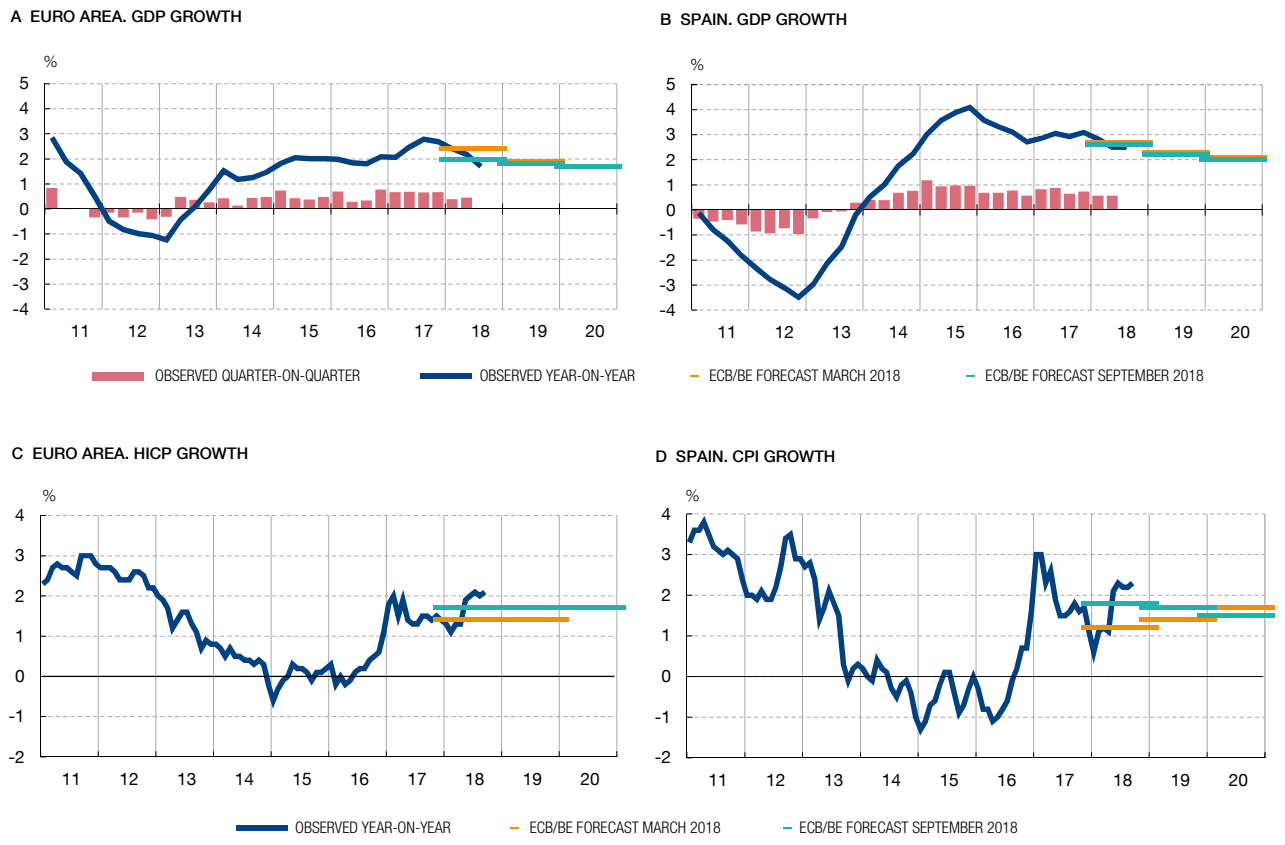
The position of other large emerging economies of material importance to the Spanish financial system is mixed. The Brazilian economy, for instance, continued to recover, albeit at a very slow rate, owing both to the aforementioned external reasons and to domestic factors. In this respect, inflation appears to be under control and the external account is balanced; however, the budget deficit has not been cut and remains at 7% of GDP, meaning that public debt may exceed 75% of GDP at the end of the year. Against this background, the markets seem to have reacted with normality to the outcome of the elections, which addeduncertainty to the baseline scenario. In the case of Mexico, the economy shrank in Q2, but owing to temporary factors. The agreement in principle of a new trade treaty with the United States in place of NAFTA is removing much of the uncertainty and external pressure to which the Mexican economy had been subject.

Turkey and Argentina have had to adopt highly restrictive measures to address financial market turbulence

Lastly, in the case of the emerging economies of relevance to Spain that have been most affected by the market turbulence, Turkey had been overheating to some extent since 2017, which translated into high inflation and a swollen external deficit, which required major foreign-currency financing flows (see Box 2.1). Against this background, the lack of confidence in the Turkish authorities regarding their readiness to apply appropriate economic policies was compounded, in early August, by the escalation of political tensions with the United States, resulting in a heavy depreciation of the Turkish lira and a weakening of financial indicators. Faced with this situation, the central bank and the banking supervision agency adopted a series of measures to provide liquidity to the banking system, raising their benchmark rate by 6.25 pp in September (Chart 1.3.D). From mid-September, the easing of tensions with the USA made for more stable financial conditions in the country, which even allowed the authorities to obtain loans on the international markets.

In Argentina's case, it is highly likely that the markets have penalised the combination of a relatively very lax fiscal adjustment with meagre progress in combating inflation. The upshot was strong capital outflows and a depreciation of the peso that led to intervention on the foreign exchange markets, a rise in policy interest rates and, finally, a request to the IMF for assistance. Insofar as the peso continued to depreciate, the authorities adopted an even more restrictive bias and renegotiated the extension and bringing forward of the funds foreseen in the agreement. The bias duly materialised: in monetary terms (initially increasing the policy interest rate to 60%, Chart 1.3.D, and subsequently suspending the inflation-targeting monetary policy, as it had lost its validity as a nominal anchor, switching temporarily to a monetary policy based on ceilings on monetary base growth), in fiscal

GDP GROWTH, INFLATION AND FORECASTS (a) CHART 1.4



SOURCES: Eurostat, INE, ECB and Banco de España.

a Euro area forecasts have been calculated by ECB, while Spanish forecasts have been calculated by Banco de España.

terms (announcing stricter targets than those included in the agreement with the IMF for 2019 – a balanced budget – and 2020 – a primary surplus of 1% of GDP –) and in exchange rate terms (central bank interventions would be restricted to a limited amount and only on occasions where the exchange rate lay outside broad bands around a central exchange rate with a daily adjustment on a pre-established path).

1.2.2 THE MACROECONOMIC SETTING IN THE EURO AREA AND IN SPAIN

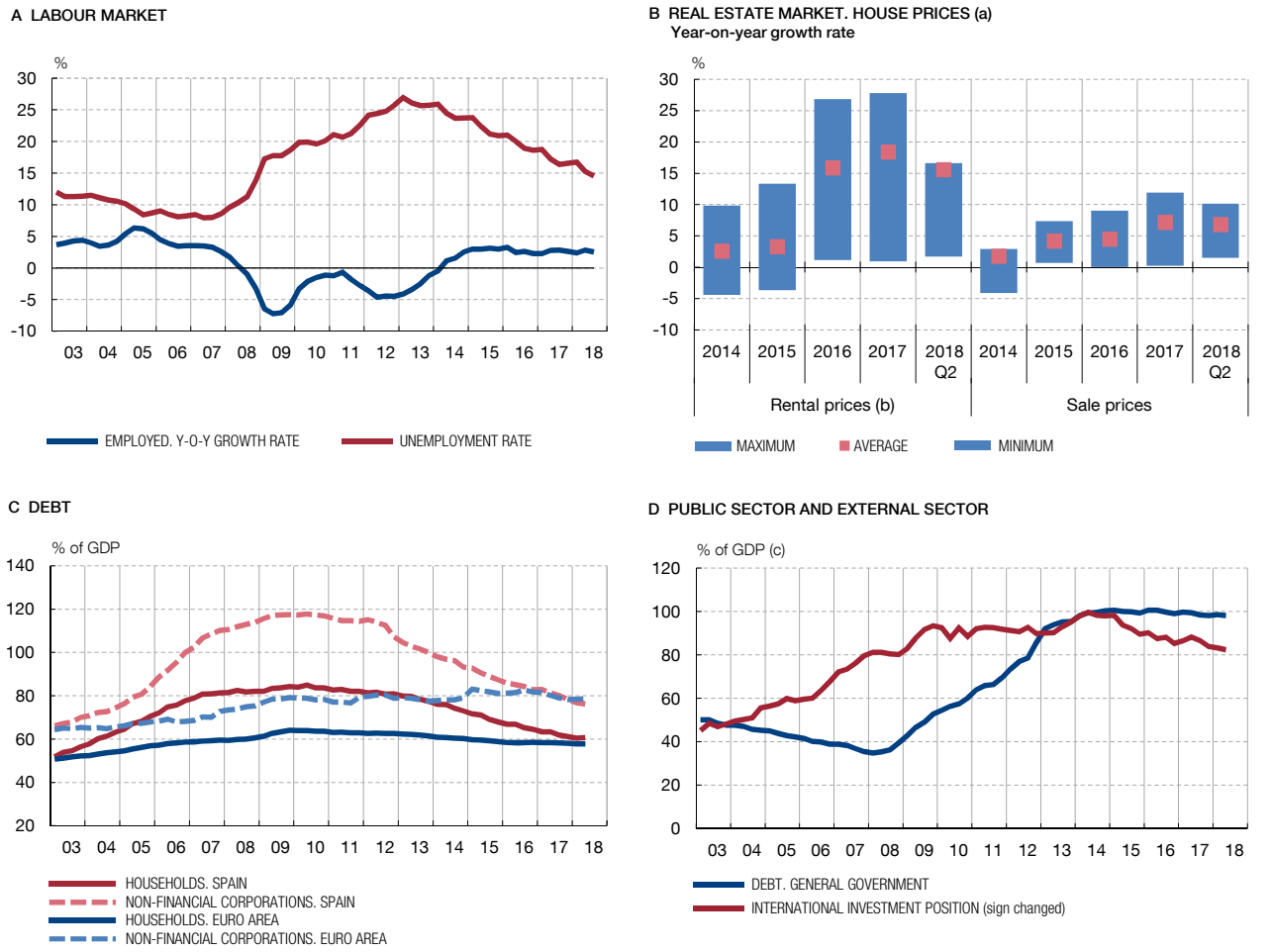
The GDP growth rate has eased in the euro area

In 2018 to date, economic activity has slowed in the euro area, leading quarter-on-quarter GDP growth to fall to 0.2% in the third quarter of the year, against 0.7% in 2017 Q4 (Chart 1.4.A). Some of the factors behind this slowdown are purely transitory, but other more permanent factors, such as the lagged effects on foreign trade flows arising from the appreciation of the euro during 2017 the worsening situation of the emerging economies and the possible impact of the geopolitical tensions and uncertainty over protectionist policies shape a more unfavourable scenario. Against this background, in September the ECB revised its growth forecasts, taking that for the current year downwards to 2%, and those for 2019 and 2020 to 1.8% and 1.7%, respectively, i.e. 0.1 pp less in 2018 and 2019 compared with the previous forecasting exercise.

Core inflation rates remain below the ECB objective

This lesser momentum of activity in the recent period has not prevented the year-on-year growth rate of the HICP from increasing in recent months to 2.1% in September, although its path continues to be highly influenced by the more volatile components (in particular by the recent upward trajectory of oil prices). The core inflation measure, which excludes the least stable items (energy and unprocessed food), continued to hover around 1.2% (1.1% in September). However, despite a rise in energy prices, the

SPANISH ECONOMY. NON-FINANCIAL SECTORS AND EXTERNAL SECTOR CHART 1.5



SOURCES: INE, Idealista and Banco de España.

a Maximum and minimum prices by region.
b As published in Idealista.
c The GDP series is seasonally adjusted.

appreciation of the euro in the first half of the year led the ECB to maintain its forecasts for the annual inflation rate at 1.7% for each of the three years of the forecasting horizon (Chart 1.4.C).

Spanish GDP continued to grow at a high though somewhat more moderate rate, a slowdown that is forecast to continue in the coming quarters

In 2018 to date, the Spanish economy has continued to move on an expansionary course, posting higher growth rates than those of the main euro area economies. That said, the quarter-on-quarter increase in GDP in Q2 and Q3 was somewhat more moderate than in the preceding quarters, at 0.6% (2.7% and 2.5% year-on-year respectively). The latest Banco de España projections, published in late September, envisage a continuation of the easing growth trend which would place the rate of expansion at 2.6%, 2.2% and 2% in 2018, 2019 and 2020, respectively, entailing a downward revision of 0.1, 0.2 and 0.1 pp compared with the June projections[1] (see Chart 1.4.B). These developments would come about against a background in which a gradual slowdown in foreign markets, a progressively lesser impact of monetary policy on agents' financing conditions and a gradual rise in the household saving rate from its current low levels are expected.

1 For further details see "Quarterly report on the Spanish economy", *Economic Bulletin 3/2018,* Banco de España.

The inflation rate will continue to be greatly influenced by the course of oil prices

Turning to prices, following the rise in the year-on-year rate of change of the CPI in the first half of the year (prompted by energy and, to a lesser extent, unprocessed food prices), this rate remained relatively steady, standing at 2.3% in September. In the coming quarters inflation is forecast to ease, influenced mainly by the energy component, the course of which will offset the gradual increase in core inflation, as a result of the foreseeable widening of the output gap and the expected acceleration in unit labour costs (Chart 1.4.D).

Employment continues to grow, albeit at a more moderate pace, and the unemployment rate has continued to decline

In the labour market, the latest available information shows some easing, during the summer months, in the buoyancy shown by employment in Q2. The seasonally adjusted quarter-on-quarter growth rate of employment fell by 0.5 pp to 0.5%, according to Spanish Labour Force Survey (EPA) Q3 data. However, this slowdown has coincided with a smaller increase in the workforce in Q3, making for a 2 pp reduction in the unemployment rate compared with the previous year, to 14.6% (Chart 1.5.A).

The recovery phase in the housing market continues, with no signs of across-the-board overvaluation discernible

Easy financing conditions and favourable macroeconomic developments have continued to boost recovery in the real estate market. Average prices rose by 6.8% in Q2 on the same period a year earlier, below the figure of 7.2% recorded six months earlier. In real terms, prices stand 33% below the 2007 peak, but 21% up on the 2014 low. The indicators based on national average prices do not show signs of across-the-board overvaluation in housing. Moreover, although the supply of new houses has also continued increasing (to 95,000 in the 12 months to August 2018, over 25% up on the August 2017 figure), current levels are far below those reached before the crisis. Also, despite the fact that new housing loans have shown high growth (17.7% year-on-year in September), their volume is still lower than that of repayments, meaning their outstanding balance continues to contract. One characteristic of the current expansionary cycle of the real estate market is high heterogeneity, with a very sharp pick-up having been observed in prices in certain areas such as the major cities and the islands, and a very moderate one in other areas. Another key aspect is the fact that the rise in the value of housing has been accompanied by notable growth in property rentals, which act as a support to house values. This has occurred against the background of the surge in demand associated with the greater weight of tenancy status at the expense of owner-occupancy (Chart 1.5.B).

The financial position of households and non-financial corporations has continued to improve, but some segments of these sectors might be vulnerable to a scenario of rising financing costs

The financial position of households and non-financial corporations has continued to improve, prolonging the tendency of recent years and underpinned by the increase in incomes, the decline in debt and the recovery in asset values, especially real estate. Hence, in 2018 Q2 non-financial corporations' debt/GDP ratio was already below the euro area average, and the related household ratio was scarcely 3 pp above the figure for the euro area countries (Chart 1.5.C). This, along with the diminished levels of the cost of debt, means that the debt burden has reached a very low level from a historical perspective. Nonetheless, given the prevalence of short-term and/or floating-rate financing, the financial position of some segments of these sectors might worsen in scenarios in which there are increases in borrowing costs that are not accompanied by an improvement in incomes. The most vulnerable agents will be those that build up high debt relative to their incomes. Under the corporate heading, the proportion of companies most exposed to this type of stress is comparatively greater among smaller firms and those that operate in the real estate development and construction sector.[2]

2 See the Box "Impact of an increase in the cost of borrowing on the economic and financial situation of Spanish non-financial corporations", *Economic Bulletin 3/2018,* Banco de España.

General government debt and, consequently, that of the economy as a whole vis-à-vis the rest of the world remains at a high level

The general government sector continued to cut its budget deficit as a percentage of GDP, lowering it to 2.7% in June 2018 in 12-month cumulated terms. That, along with the recovery in nominal output, has contributed to checking the increase in the public debt/GDP ratio. However, this ratio is still at a very high level (98.1% of GDP), meaning it is necessary to continue with the efforts to further budgetary consolidation (Chart 1.5.D). High public sector debt contributes to the Spanish economy's international net financial position being notably in debit. The running of current and capital account surpluses in recent years (albeit with a slight declining trend in the recent period) has, in combination with GDP growth, enabled the net debit position to be cut by slightly more than 17 pp from its peak in 2014 Q2. That said, in 2018 Q2 this position was still at 82.4% of GDP. Spain's gross external debt fell by 0.1 pp relative to GDP, to 168.2%, 6.4 pp down on its early 2015 peak.

There are risks of more adverse than expected macroeconomic developments unfolding, in a setting in which the high debt levels of the general government sector and of the nation vis-à-vis the rest of the world are a factor of vulnerability ahead of the potential materialisation of such risks

Since the publication of the last FSR in May 2018, the economic and financial position of the various non-financial sectors of the Spanish economy has continued to improve, assisted by the prolongation of the macroeconomic upturn, the decline in debt and low borrowing costs. However, the debt levels of the general government sector and of the economy as a whole vis-à-vis the external sector remain high, which raises the Spanish economy's vulnerability to any adverse future developments in activity or in financing conditions.

In the short and medium term, the current upturn in the Spanish economy is expected to continue, albeit at more moderate rates than in the past. But this scenario is subject to high uncertainty, whereby there are some risks – external and domestic alike – that more unfavourable developments will unfold. The key external risks are linked to the potentially adverse course global financial conditions and an escalation of protectionist measures may take, and to political and geopolitical factors, including most notably a disorderly, hard Brexit and the uncertainty surrounding budgetary policy in Italy. Domestic risks include uncertainty over the future economic policy stance in the current setting of a fragmented parliament in Spain, and a possible rise in political tensions in Catalonia.

2.1 Banking risks

2.1.1 CREDIT RISK

In June 2018, consolidated assets decreased by 0.5 % year-on-year as a result of the performance of business in Spain

International exposure

The consolidated assets of Spanish deposit institutions stood at €3,551 billion in June 2018 (see Annex 1), down 0.5% from a year earlier. This slight decline in consolidated assets was the result of the fall in activity in Spain, where financial assets dropped by 2.8% year-on-year. In contrast, the volume of financial assets abroad of Spanish banks rose with respect to the same month of the previous year (2.5% year-on-year), despite the strong depreciation of the currencies of countries in which Spanish banks have a significant presence, as discussed in Chapter 1. Thus, financial assets abroad, as a percentage of total consolidated financial assets, increased to over 45% in June 2018 (see Chart 2.1).

Activity abroad is concentrated in the United Kingdom, the United States, Mexico, Brazil. Portugal and Turkey

Chart 2.2.A shows the geographical breakdown of the loans abroad of Spanish banks with significant international exposure. The activity abroad of Spanish banks is concentrated mainly in six countries which account for more than 70% of loans abroad: the United Kingdom (28.2%), the United States (14.9%), Mexico (8.6%), Brazil (8%), Portugal (6.5%) and Turkey (4.6%).

Activity in emerging countries consists mainly of lending to households and non-financial corporations

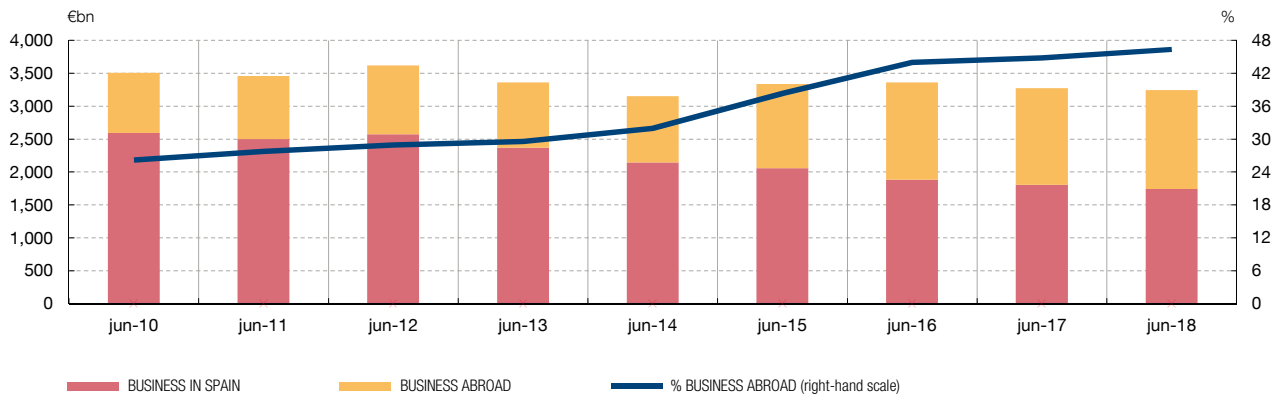
Chart 2.2.B shows the geographical breakdown of lending mostly to households and non-financial corporations in the main emerging countries with a presence of Spanish banks. Notable in Turkey and Peru is the importance of lending to non-financial corporations (more than 50% of total loans), while in Chile, Poland and Colombia lending to households accounts for more than 50% of total loans. Deposits with central banks are particularly important in Brazil and Argentina (accounting for more than 20% of the total). Lastly, in Mexico the proportion of lending to households and to non-financial corporations is more even.

The performance of business abroad was influenced...

Chart 2.3 shows the rate of change in euros of loans in the main countries, and the changes in the exchange rate of their respective currencies. Between June 2017 and June 2018, the

INTERNATIONAL EXPOSURE. FINANCIAL ASSETS (a)
Consolidated data

CHART 2.1

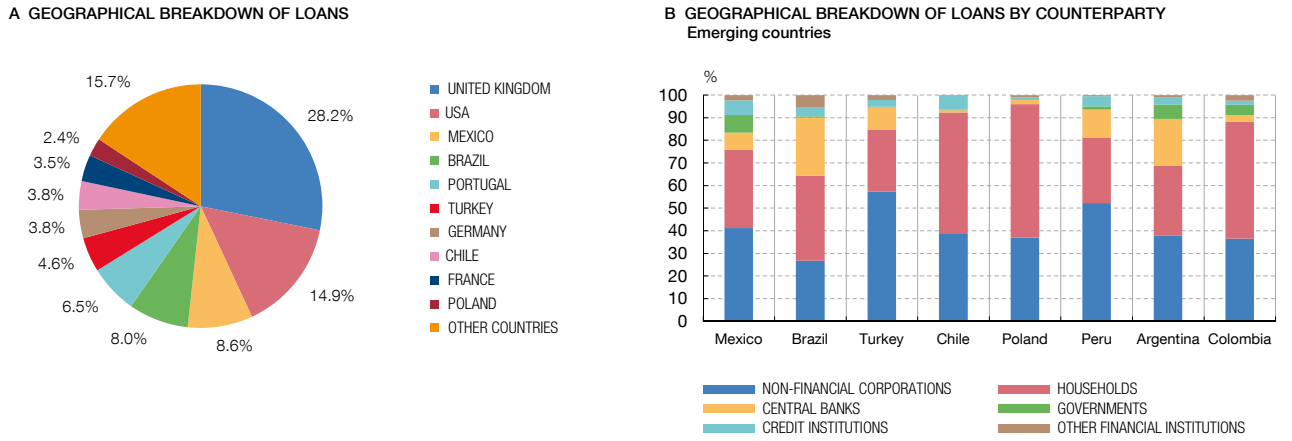


SOURCE: Banco de España.

a Total financial assets, which represent more than 90% of total assets, include loans and advances, debt securities, derivatives and equity instruments, and the distribution between business in Spain and business abroad is based on this magnitude.

INTERNATIONAL EXPOSURE. GEOGRAPHICAL BREAKDOWN OF LOANS
Consolidated data

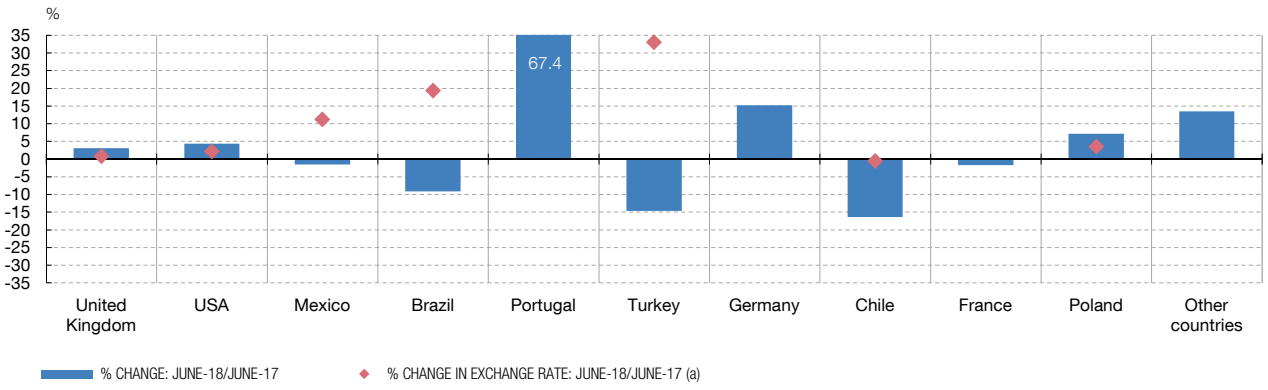
CHART 2.2



SOURCE: Banco de España.

INTERNATIONAL EXPOSURE. LOANS. YEAR-ON-YEAR RATES OF CHANGE IN EUROS
Consolidated data

CHART 2.3



SOURCE: Banco de España.

a A positive (negative) value in the growth rate indicates an appreciation (depreciation) of the euro against the foreign currency.

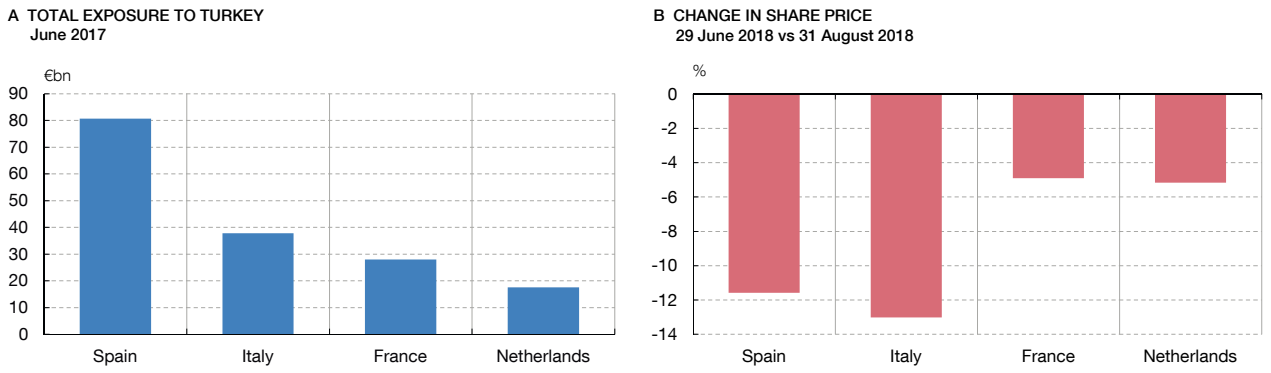
...by the widespread appreciation of the euro, particularly against the currencies of the main emerging countries in which Spanish deposit institutions operate (Mexico, Brazil and Turkey)

euro appreciated generally against the other currencies, particularly against the Turkish lira (33%), the Brazilian real (19.4%) and the Mexican peso (11.2%). The appreciation of the euro against these currencies helps to explain the decrease in the volume of loans in Turkey (–14.7%), Brazil (–9.2%) and Mexico (–1.6%). The volume of loans in Chile decreased by 16.4% despite the fact that the euro depreciated slightly (–0.5%) against the Chilean peso, due to some extent to the sale of part of the banking business by a Spanish bank. Conversely, in the United Kingdom, the United States and Poland the volume of loans grew despite the appreciation of the euro against their respective currencies. In Portugal, the integration of a Portuguese bank into a Spanish one led to a substantial increase in the volume of loans (67.4%).

The strong appreciation of the euro between June 2017 and June 2018, against the currencies of the main emerging countries in which Spanish banks operate, was fuelled in 2018 Q3, particularly by the crisis that broke out in Turkey in August 2018, which led to notably higher volatility in foreign exchange markets, ultimately affecting the share prices of many European banks. Chart 2.4 shows the behaviour of share prices of European banks

EXPOSURE TO TURKEY AND CHANGE IN SHARE PRICE OF BANK WITH BIGGEST EXPOSURE TO THAT COUNTRY

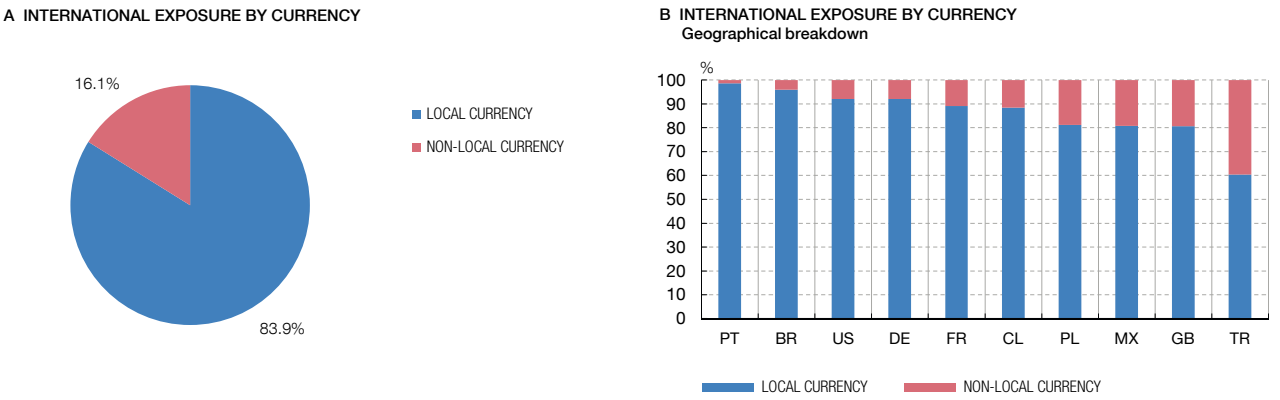
CHART 2.4



SOURCES: EBA and Datastream.

INTERNATIONAL EXPOSURE. ACTIVITY IN LOCAL CURRENCY
Consolidated data

CHART 2.5



SOURCE: Banco de España.

with the biggest exposure to Turkey. Box 2.1 describes in detail the country's macroeconomic situation and its potential impact on Spanish banks with a presence there.

As regards international exposures, there are two issues worth noting. First, the fact that the nature of the risks affecting the exposures of advanced economies differs from those affecting emerging economies. The former are more linked to a potential change in the valuation of assets, while the risks affecting emerging countries are more often related to increases in NPL ratios. Second, Spanish deposit institutions conduct their business abroad following a decentralised liquidity and funding management model, in which each subsidiary must manage its needs independently. Moreover, as can be seen in Chart 2.5, activities abroad are conducted mainly in the local currency of the country in question. Specifically, in June 2018, 83.9% of the financial assets abroad were denominated in the local currency of the countries in which these assets were located. By country, the activities conducted in the local currency in Portugal, Brazil, the United States and Germany, accounted for more than 90% of total financial assets, followed by France and Chile, with more than 85%, and Poland, Mexico and the United Kingdom, where the percentage of business conducted in the local currency represented around 80% of total financial assets. Finally, Turkey exhibited the lowest proportion of activity in local currency, with a share of business denominated in Turkish lira that accounted for 60% of the total.

The Turkish economy has been showing clear signs of overheating since 2017, as a result of lax fiscal and monetary policies and credit-boosting measures that have compounded its main macroeconomic imbalances. Thus, against a background of high GDP growth, which posted a rate of 7.4% in 2017 and in 2018 Q1, and eased slightly to 5.2% in 2018 Q2, the inflation rate has held above 10% over the last 18 months, peaking in September at 24.5%, a 15-year high far above the Turkish central bank's target of 5%.

The dependence on external financing and the limited buffers available (international reserves) are the main vulnerabilities of the Turkish economy. The current account deficit has been widening, standing at 6.5% of GDP in mid-2018. Moreover, only a small portion of it is covered by foreign direct investment, while the central bank's international reserves (without including those belonging to banks) scarcely cover two months' imports. Gross external debt stands at 53% of GDP, and is predominantly denominated in foreign currency (58% in dollars and 33% in euro); further, one-quarter of such debt is short-term, thereby contributing to raising annual external refinancing needs, which amount to close to 27% of GDP. Most of this external debt corresponds to the private sector, in particular the banking and corporate sectors. These are largely funded by foreign currency, which makes them vulnerable to a deterioration in financial conditions and to a depreciation of the exchange rate. Lastly, it should be stressed that although public finances are fairly healthy, the central government deficit has also worsened, and it is forecast to be close to 2% of GDP at year-end, while public debt stands at 28% of GDP.

Against this backdrop, the Turkish president decided last April to bring forward the presidential elections (scheduled for November 2019) to June 2018, fuelling concerns already voiced by international investors about greater economic interventionism and possible interference in the central bank's independence. Indeed, after raising the policy interest rate by 500 bp between April and June (to

Chart A
GDP AND CONTRIBUTIONS TO GDP GROWTH

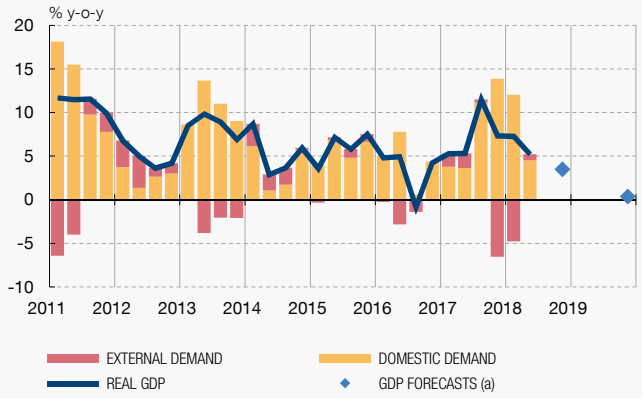


Chart B
EXTERNAL POSITION (12-month moving average)

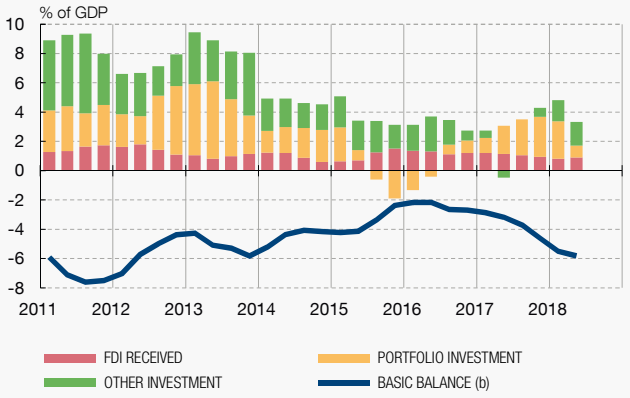


Chart C
TURKEY: POLICY INTEREST RATES

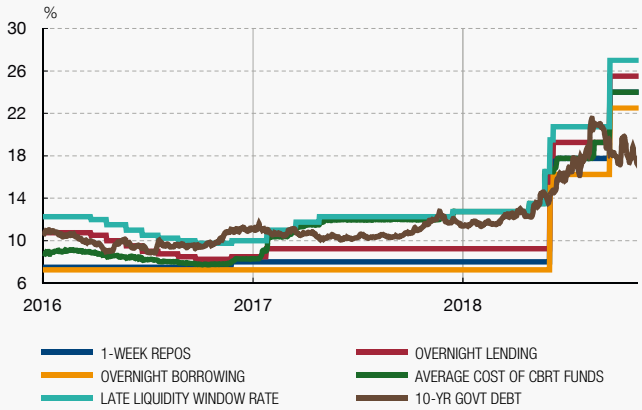
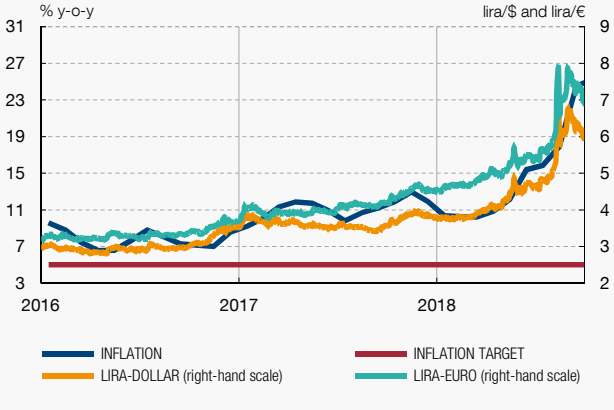


Chart D
TURKEY: INFLATION AND EXCHANGE RATES



SOURCES: Datastream, Bank of Turkey, Secretariat of the Turkish Treasury and IMF.

a IMF forecasts.
b Current account balance + FDI.

17.75%), the central bank held its interest rates unchanged in August in a setting of turbulence on the emerging financial markets. This prompted fresh attacks against the Turkish lira, adding to which just a few days later were the effects of the escalation of geopolitical tensions between Turkey and the United States (with mutual retaliation in the trade arena). Hence, in the year to date the Turkish lira has depreciated by around 50% in nominal effective terms and the country's sovereign debt yield has risen from around 12-14% as at late December 2017 to its current level of 21%. Further, Turkey's sovereign spread (EMBI) has widened by 300 bp and the Turkish stock exchange has fallen by more than 20%.

In terms of the economic policy response, the central bank and the banking supervision agency adopted a series of measures in August to provide liquidity to the banking system and to check the depreciation of the lira. As from mid-August, liquidity was supplied to banks at the overnight lending rate, entailing an effective rise in rates of 150 bp to 19.25%. At the September monetary policy meeting, the central bank decided to raise the policy rate by 6.25 pp to 24%, managing to calm the markets. On the fiscal front, the Turkish government announced an as yet unspecified adjustment plan to reduce the budget deficit, although it also announced tax cuts. Likewise it has reiterated that no controls will be placed on capital outflows. The government has approached countries such as Qatar, Russia and China to obtain external financing. Indeed, in mid-August Qatar announced direct investment in Turkey worth $15 billion and both countries' central banks entered into a swap agreement for $3 billion.

Against this background of financial deterioration and the sharp – though reactive – economic policy adjustment, the economic outlook for Turkey is one of intense slowdown as from the second half of 2018, as already testified by the latest high-frequency indicators, with the country potentially going into recession in 2019.

The only Spanish bank with significant economic interests in Turkey is BBVA, through its holding in the Turkish bank Türkiye Garanti Bankasi A.Ş (Garanti). BBVA is this bank's biggest shareholder with a stake of 49.9%. Garanti is Turkey's second-biggest private bank and ranked third if the public banks are included, and has a market share of 11% in total assets as at June 2018. It has assets totalling €73 billion, accounting for 11% of the BBVA group's total assets. Garanti's net profit as at June 2018 totalled €748 million, although it contributes, in terms of the BBVA's holding in the Turkish bank, €373 million, which accounts for 14% of the group's attributed profit (€2.6 billion).

Garanti is a commercial bank, with financial autonomy from BBVA (intra-group loans are very low), in keeping with the decentralised business model characterising the Spanish bank's international operations. This means that one institution's potential liquidity problems do not spread and affect the group as a whole; no obligations or liquidity facilities based on a commitment by the group towards the subsidiary are in place. Moreover, BBVA sets aside partial provisioning to mitigate the fluctuation of the Turkish lira in the value of its own funds and in the profit contributed by its investee. From the solvency standpoint, in the extremely hypothetical case that this stake were to be sold for a minimum amount, the impact on CET1 capital ratio would be very limited.

As regards the future of the Turkish subsidiary, the main concerns are, first, the rollover of foreign currency-denominated wholesale funding. The only maturity this year is in November, involving a syndicated loan with a tranche in dollars of 405 million, and another for €649 million. A further concern is the economic slowdown and the depreciation of the Turkish lira, which will exert a significant impact on the impairment of the quality of the credit portfolio and, in particular, on borrowers who finance themselves in foreign currency (around 40% as at June 2018, concentrated in companies). Under the baseline scenario which the main international organisations are currently using, the impact that this would have on the group's solvency would be limited.

Total non-performing assets

Consolidated non-performing assets decreased by 21.6% year-on-year

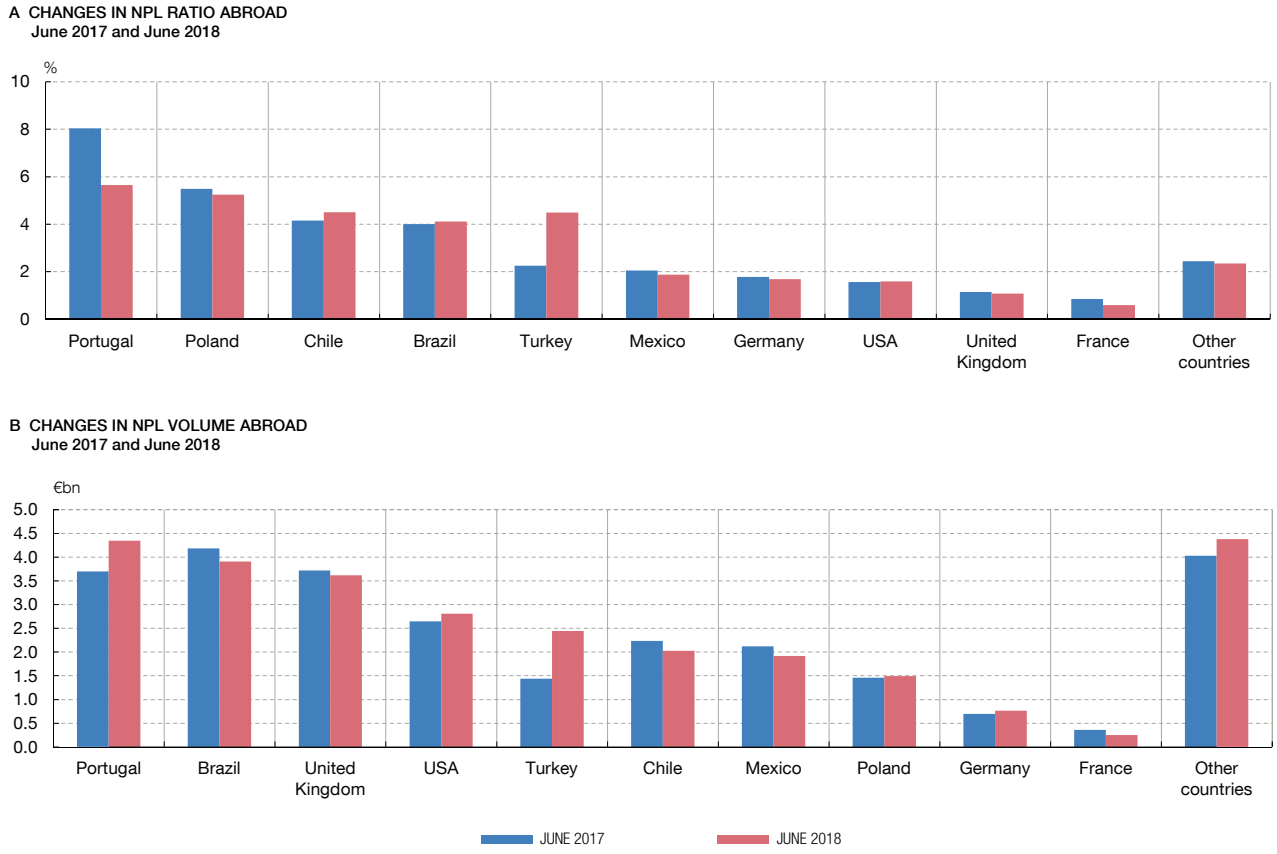
The total volume of consolidated non-performing assets (including loans and debt securities) decreased further in 2018 H1 to €108.2 billion, a fall of 21.6% in year-on-year terms (see Annex 1). Thus, in June 2018, non-performing assets made up 3% of the consolidated total assets of Spanish deposit institutions, compared with 3.9% observed in June 2017.

The total non-performing assets ratio stood at 3.6% and the non-performing loans ratio at 4.1%

The decrease in the total volume of consolidated non-performing assets pushed the total non-performing assets ratio down to 3.6%, a decrease of 97 bp with respect to that recorded a year earlier (4.5%). Excluding debt securities, the NPL ratio dropped from 5.3% in June 2017 to 4.1% a year later.

INTERNATIONAL EXPOSURE. NON-PERFORMING LOANS
Consolidated data

CHART 2.6



SOURCE: Banco de España.

The non-performing loans ratio generally remained stable in the main countries where Spanish deposit institutions are present, with the exception of Portugal and Turkey, where the behaviour was mixed

Chart 2.6 shows the changes in non-performing loans abroad between June 2017 and June 2018. The NPL ratio behaved unevenly in the six countries which, in aggregate terms, account for more than 70% of loans abroad (see Chart 2.6.A). Thus, while the NPL ratio continued to hold below 2% in the United Kingdom, the United States and Mexico, in Portugal it fell from 8% in June 2017 to 5.5% in June 2018. This decline resulted from the increase in the volume of loans following the integration of a Portuguese bank into a Spanish institution, which also entailed an increase in the volume of NPLs (see Chart 2.6.B). By contrast, the NPL ratio in Turkey doubled to stand at 4.5%. As regards the other countries analysed, the ratio remained between 4% and 4.5% in Brazil and Chile and slightly above 5% in Poland. In Germany and France, the ratio held at around 2% and 1%, respectively.

Domestic exposure

The data drawn from individual financial statements allow the activity of Spanish deposit institutions relating to their business in Spain to be analysed. Broadly, 2018 H1 saw a continuation of the main trends that have characterised domestic exposure in recent years: moderate fall in lending and significant reduction of troubled assets. In fact, the decrease in lending can largely be explained by the behaviour of these assets, as discussed in the following section.

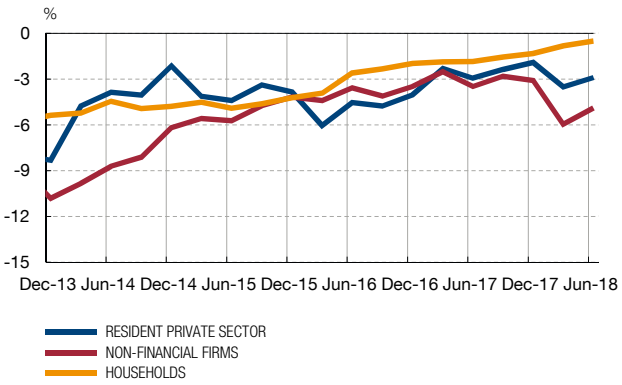
Lending to the resident private sector declined moderately, continuing...

In June 2018, credit granted by deposit institutions to the resident private sector in Spain fell by 2.9% year-on-year (see Chart 2.7.A). This rate is very close to that observed twelve months earlier and is, in fact, also very similar to all those recorded since the beginning

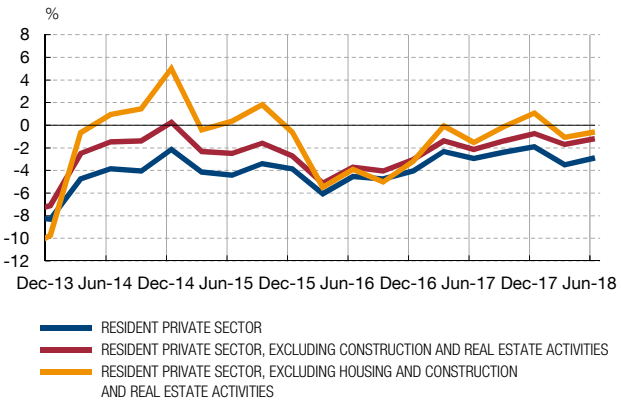
CREDIT TO THE RESIDENT PRIVATE SECTOR. YEAR-ON-YEAR RATE OF CHANGE
Business in Spain, ID

CHART 2.7

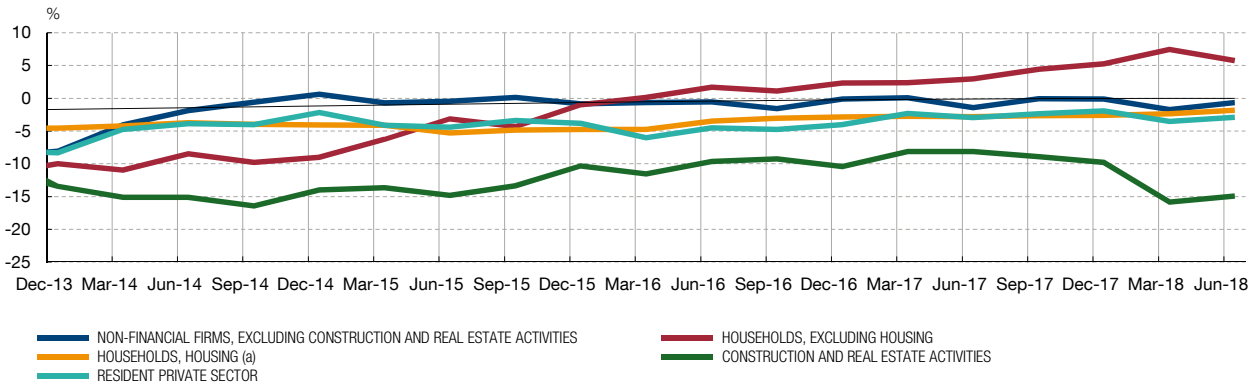
A YEAR-ON-YEAR RATE OF CHANGE IN CREDIT TO RESIDENT PRIVATE SECTOR, BY INSTITUTIONAL SECTOR



B YEAR-ON-YEAR RATE OF CHANGE IN CREDIT TO RESIDENT PRIVATE SECTOR, BY SECTOR OF ACTIVITY



C YEAR-ON-YEAR RATE OF CHANGE IN CREDIT TO RESIDENT PRIVATE SECTOR, BY INSTITUTIONAL SECTOR AND BY SECTOR OF ACTIVITY



SOURCE: Banco de España.

a This series includes securitisations.

...the trend of recent quarters

of 2017. Thus, outstanding credit to the resident private sector stood at €1,174 billion, with a cumulative decline of €677 billion from the peak reached in December 2008, which represents a decrease of 37%.

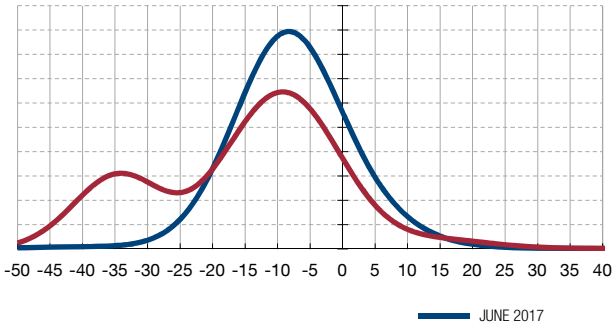
The decline in lending to households moderated in comparison with previous years, but accelerated in the case of non-financial corporations

Since the publication of the previous FSR, the behaviour of lending to households has been slightly more positive than that of total lending, while lending to non-financial corporations has moved in the opposite direction. Specifically, lending to households fell by 0.5% in June 2018 in year-on-year terms, against –1.8% observed in June 2017 and –1.3% recorded in December of that year. Meanwhile, lending to non-financial corporations declined by 4.9% in the past year, compared with –3.5% in June 2017 or –3.1% in December 2017. This change in trend is due to two factors: the increase in consumer credit and the notable further decline in the construction and real estate sectors, largely as a result of the sale of part of the non-performing loans portfolio. In fact, if lending for construction and real estate activities is excluded from the total volume of lending to the resident private sector, the behaviour of lending was more favourable, with a decline of only 1.2% in the past year (see Chart 2.7.B). If, moreover, loans for house purchases are excluded (the other large segment of loans facing major adjustments since the onset of the crisis), the rates of change are close to zero. In addition, mention should also be made of the role played by the higher profit margins and some of the non-conventional monetary

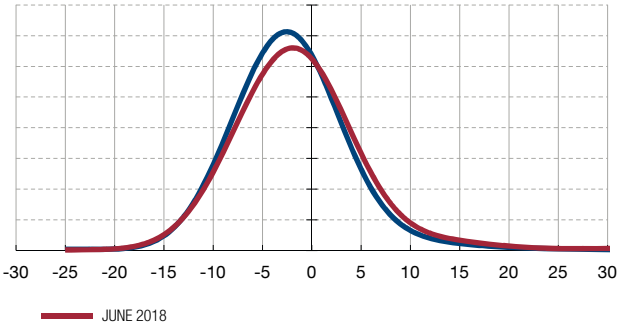
CREDIT TO THE RESIDENT PRIVATE SECTOR
Business in Spain, ID. Deposit institutions

CHART 2.8

A DISTRIBUTION OF CREDIT TO CONSTRUCTION AND REAL ESTATE ACTIVITIES, BY RATE OF CHANGE (a)



B DISTRIBUTION OF CREDIT TO THE RESIDENT PRIVATE SECTOR, EXCLUDING CONSTRUCTION AND REAL ESTATE ACTIVITIES, BY RATE OF CHANGE (a)



SOURCE: Banco de España.

a The graph shows the density function (or frequency distribution) of the year-on-year rates of change in credit for Spanish deposit institutions, weighted by the credit corresponding to each institution. 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.

policy measures of the European Central Bank (specifically, the private debt purchase programmes) in the decrease in lending to firms.

In households, the behaviour of lending for purposes other than house purchase was more favourable, with year-on-year growth of 5.7%

In lending to households, the behaviour of loans for house purchase differed greatly from that granted for other purposes, basically consumer credit. While the former decreased by 1.8% in June 2018 in year-on-year terms, the latter grew by 5.7% in the same period, thereby continuing the upward trend seen since mid-2016, when the first positive rates of change were recorded for this segment of lending (see Chart 2.7.C). For more detail on recent developments in consumer credit, see Box 2.2.

In non-financial corporations, there was a further sharp decline in construction and real estate loans, partly prompted by the sale of this sector's non-performing loans

The behaviour of lending to non-financial corporations also differed greatly depending on the sector of activity of the firm receiving the loan. While loans to the construction and real estate sector fell by 14.9% in the past year (exceeding the rate of 8.1% observed in June 2017), those granted to other sectors posted a negative rate of only 0.7% year-on-year. It should be noted that the behaviour of loans to non-financial corporations for purposes other than construction and real estate activities has been very similar since 2014, with near-zero rates across the board.

The behaviour of non-performing assets had a significant impact on the rates of change of credit. If only credit classified as performing is taken into account, the total outstanding balance of deposit institutions decreased by only 0.7% year-on-year, with positive rates of change of up to 1.5% in the sector of non-financial corporations other than those engaged in construction and real estate activities.

There lower rate of decline in lending was across the board, although the rates of change varied more widely in the case of the real estate activities and construction sector

Chart 2.8.A shows the distribution of the rate of change of credit granted for real estate activities and construction, and the increase in the variability between institutions in 2018, compared with that observed in 2017. This is due to the sale by certain banks of part of their NPL portfolios, resulting in unusually negative rates of change, which do not reflect the actual behaviour of lending at the bank in question. Therefore, what happens when this segment of loans is excluded needs to be analysed. Chart 2.8.B shows the distribution of the rate of change of credit granted for other purposes (not construction and real estate), and reveals greater homogeneity and a slight shift of the distribution towards less negative rates of change in the past year.

The previous FSR specifically examined the issue of consumer credit, pointing out that the performance of this segment of lending and its NPL rates would be monitored closely in coming quarters. Accordingly, the purpose of this box is to follow up and further elaborate on Box 2.1 of the May 2018 FSR. The segment of lending to households for purposes other than house purchase can be broken down into consumer credit and credit for other purposes. This box focuses on analysing consumer credit through its two components: credit for purchase of consumer durables and credit for purchase of other goods and services. In the second part of the box, the analysis is extended to include specialised lending institutions (SLIs), whose importance in the consumer credit segment is far from negligible, as explained below.

Chart A shows the expansionary pattern of consumer credit in recent years,[1] from €44.4 billion in June 2015 to €62.8 billion in June 2018 (growth of over 40%). Within consumer credit, loans for purchase of consumer durables account for the bulk of growth, increasing from €20.5 billion in June 2015 to almost €35 billion in June 2018 (growth of 70%), while loans for purchase of goods and services also increased, but not as much (by 16.5%, from €23.9 billion to €27.9 billion). Thus, the weight of loans for consumer durables has risen by 10 pp in the last three years, from 46% in June 2015 to 56% in June 2018. In any event, consumer credit granted by deposit institutions accounts for 5.3% of total credit to the resident private sector.

Since the publication of the previous FSR, a slight slowdown has been observed in consumer credit extended by Spanish deposit institutions for purchase of consumer durables, from 27% in December 2017 and 28% in March 2018, to 23% in June 2018.

In this segment, NPL rates for consumer credit have risen by 8.6% in the past year, driven by the strong growth of the NPL rates of loans for purchase of consumer durables. NPLs for this segment of lending grew by 22.6% between June 2017 and June 2018, while

1 The data that appear in this box include, from July 2017, the business of a former specialised lending institution that was integrated into a deposit institution at that date.

Chart A
CHANGES IN THE COMPONENTS OF CONSUMER CREDIT
Deposit institutions

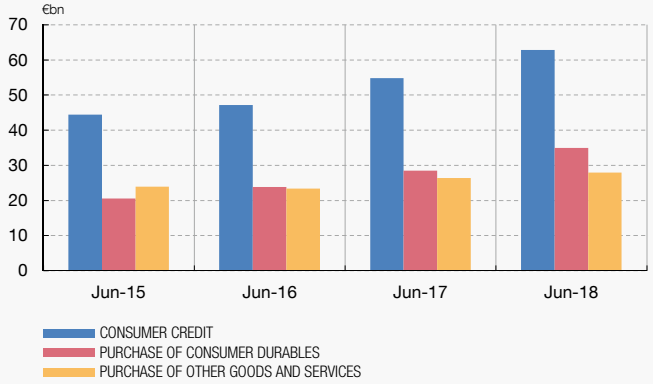


Chart B
BREAKDOWN OF NPL RATIO OF CREDIT FOR PURCHASE OF CONSUMER DURABLES
Deposit institutions

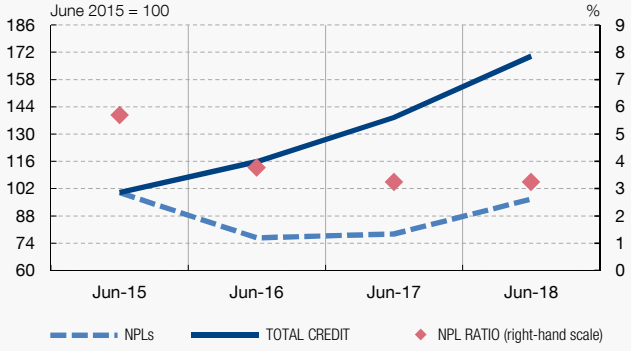


Chart C
BREAKDOWN OF NPL RATIO OF CREDIT FOR PURCHASE OF OTHER GOODS AND SERVICES
Deposit institutions

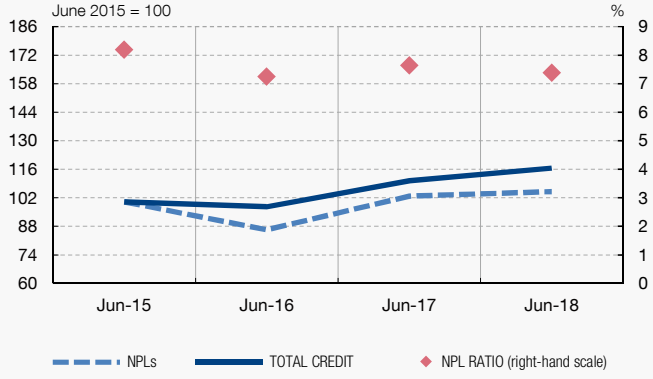
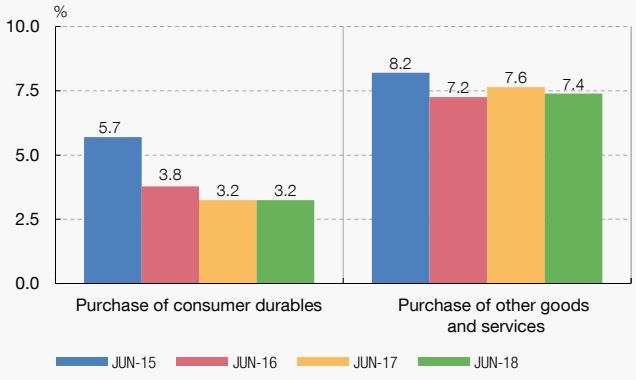


Chart D
NPL RATIO OF THE COMPONENTS OF CONSUMER CREDIT
Deposit institutions



SOURCE: Banco de España.

Chart E
YEAR-ON-YEAR RATE OF CHANGE OF THE COMPONENTS OF CONSUMER CREDIT
Deposit institutions and specialised lending institutions

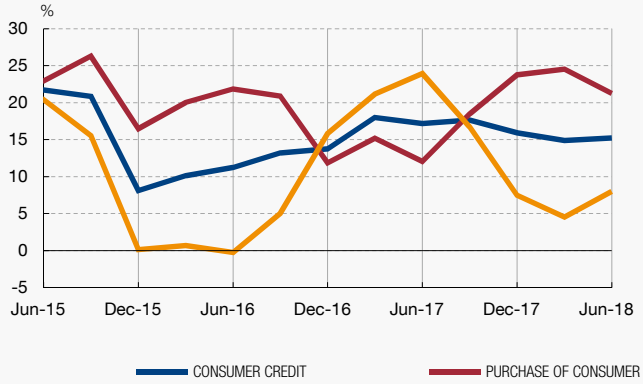


Chart F
YEAR-ON-YEAR RATE OF CHANGE OF NPLs OF THE COMPONENTS OF CONSUMER CREDIT
Deposit institutions and specialised lending institutions

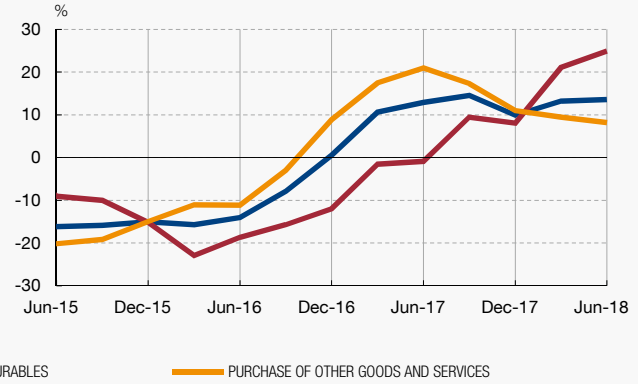


Chart G
YEAR-ON-YEAR RATE OF CHANGE OF CONSUMER CREDIT IN THE MAIN EURO AREA COUNTRIES
Deposit institutions and specialised lending institutions

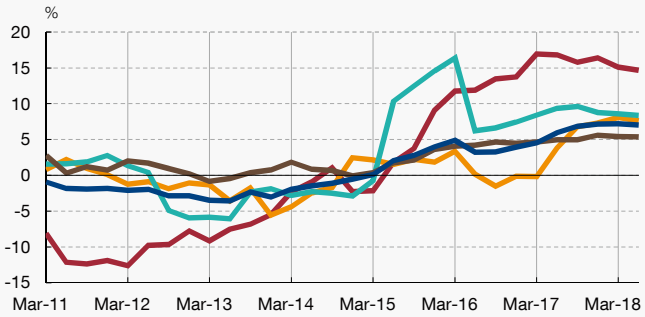
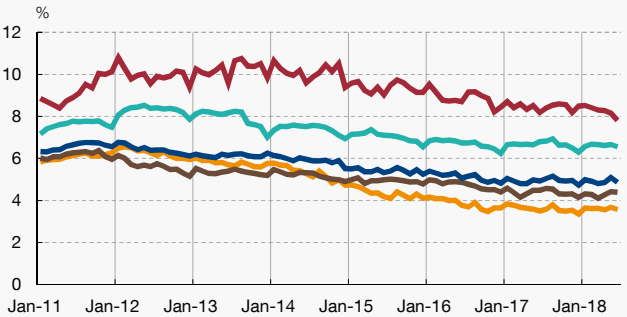


Chart H
NEW LOAN INTEREST RATES IN THE MAIN EURO AREA COUNTRIES
Deposit institutions and specialised lending institutions



SOURCES: Banco de España and ECB.

those for the purchase of other goods and services increased to a much lesser extent, by barely 2.1%. Since the last FSR, the NPL growth rate for durable goods quickened notably, from 7% in December 2017 to 19% in March 2018, and then to 22.6% in June 2018, as mentioned above.

Charts B and C break down the NPL ratios of loans for consumer durables and for other goods and services, respectively, into variations of the numerator (NPLs) and the denominator (credit). Chart B shows how the NPL ratio of loans for purchase of consumer durables has declined in recent years owing to the sustained growth in lending, with similar NPL levels in 2018 to those observed in 2015 (around €1.1 billion). However, there have been significant differences in the behaviour of NPL rates in the past year in this type of lending, with a reversal of the previous fall and an increase in volume of more than 20%, against a setting of economic growth and declining unemployment rates. As can be observed in Chart C, the slight reduction in the NPL ratio of loans for purchase of other goods and services in the past year is due to the fact that the growth in lending (€1.5 billion) was somewhat higher than that of NPLs (€0.04 billion).

Lastly, Chart D presents the NPL ratios of the two components of consumer credit. The NPL ratio of loans for purchase of consumer durables stood at 3.2% in June 2018, while that of purchase of other goods and services was 7.4%. Both ratios have fallen since 2015, but that of loans for purchase of consumer durables has declined to a greater extent. In any event, it should be noted that there is a time lag between credit growth and NPL growth. Although NPL ratios are not yet on the rise, their behaviour warrants close attention, as the accelerated growth of consumer credit could translate into a surge in NPLs in the future.

In the remaining section of the box the analysis of consumer credit extended by specialised lending institutions is added. In June 2018, this amounted to more than €22 billion and accounted for 26.2% of consumer credit granted by deposit institutions and SLIs as a whole. A total of 70% of the consumer credit business of SLIs corresponds

to subsidiaries of Spanish banks. The remainder is mostly in the hands of financial companies of car manufacturers and some foreign bank branches (particularly European). Consumer credit granted by deposit institutions and SLIs increased by 15.2% year-on-year in June 2018, a similar growth rate to that of previous quarters, albeit slightly lower. By component, as Chart E shows, loans for purchase of consumer durables grew the most, by 21.3 % in June 2018, but at a slower pace than that recorded in previous quarters. Loans for purchase of other goods and services increased by 8%, accelerating their growth with respect to the previous period.

In recent quarters, NPLs for purchase of consumer durables have increased further to €1.4 billion (24.9% in June 2018), outstripping the rate of change of NPLs for purchase of other goods and services (8.2%), which rose to €2.6 billion. As a result, NPL rates for consumer credit increased by 13.6% in June 2018 (see Chart F). These rates are somewhat higher than those observed exclusively for deposit institutions, especially in loans for other goods and services (8.6% for consumer credit, 22.6% for durables and 2.1% for other goods). The NPL ratio of loans for consumer durables is relatively lower (2.9% in June 2018) than that of loans for other goods and services (7.1%), such that, as was the case when only considering deposit institutions, loans for purchase of consumer durables are comparatively better in terms of credit quality. Both ratios are slightly lower than those of credit extended exclusively by deposit institutions, and their behaviour in recent years is very similar to that mentioned for deposit institutions.

In the European comparison[2], shown in Chart G, the trend described in the previous FSR is maintained. Consumer credit in Spain has continued to increase at rates that are significantly higher than those of the main European countries (the European average was 7% in June 2018), as has been the case since mid-2016. The trend in recent years contrasts with that observed in 2011 and 2012, when consumer credit in Spain fell more sharply than in other European countries. Accordingly, the recent performance may be explained, at least in part, by the lower starting levels that are now beginning to recover. This behaviour would appear to show that, given the improvement in both economic activity and the employment rate, consumer decisions that had been postponed in previous years, are now being taken.

As regards prices in this segment of lending, Chart H shows that interest rates for new consumer credit with maturities of one to five years in Spain are considerably higher than those applied in the main European countries. In June 2018, the average rate for these operations in Spain was 7.8%, compared with 4.9% in the euro area. In the current low interest rate environment in which banks operate, the high rates for this type of lending may be prompting banks to seek opportunities to obtain higher returns but at the potential cost of assuming higher risks.

To conclude, the most active segment of bank lending continues to post a high growth rate, although somewhat more moderate in the last quarter. Its NPL rates have continued to increase, but this has not yet translated into a higher NPL ratio. However, the time lag between credit growth and NPL growth means that consumer credit and its NPL rates should continue to be analysed in depth in coming quarters. Banks should continue to monitor the behaviour or non-performing loans, providing adequate coverage for new NPLs, and pay close attention to the lending conditions for this type of loans, avoiding any easing of the credit standards required to ensure that this, more profitable, lending, does not end up having the highest risk, as a result of the losses it may entail. Moreover, on the demand side, it should be borne in mind that the household saving ratio stood at 4.4% of household disposable income in 2018 Q2, 5 pp down on two years earlier. Sooner or later, very fast credit growth is always associated with higher risk levels and NPL rates, and this should prompt banks to carefully examine the sustainability of such growth rates, to ensure that they are in keeping with the desired risk profile.

2 This comparison, as with that of interest rates in Chart H, is based on data taken from the ECB's Balance Sheet Items database, which includes credit extended by deposit institutions and by SLIs, as discussed in the second part of the box.

By firm size, the fall in lending was more pronounced in the case of SMEs, owing to their higher concentration in the sectors which have undergone greater adjustments

By firm size, lending to large firms fell by 3.1% in the past year, compared with the decrease of 7.2% in lending to SMEs in the same period (see Chart 2.9.A). This more negative behaviour is partly due to the greater weight of lending for construction and real estate activities in total credit to SMEs, compared with large firms. Since 2014, in the SME sector, the weight of the smallest (microfirms) and largest (medium-sized) firms has increased to the detriment of those of intermediate size (small firms, see Chart 2.9.B).

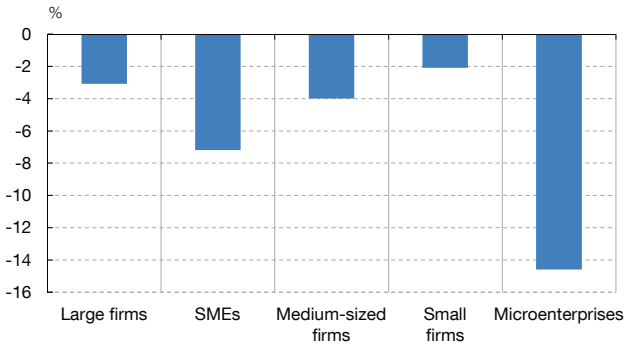
New lending granted in the first six months of 2018 rose with respect to the same...

Given the behaviour of troubled assets, partly the result of active management by banks and supervisory pressure, new lending in recent months should be analysed. In the first half of 2018, deposit institutions in Spain granted loans amounting to €207 billion to the

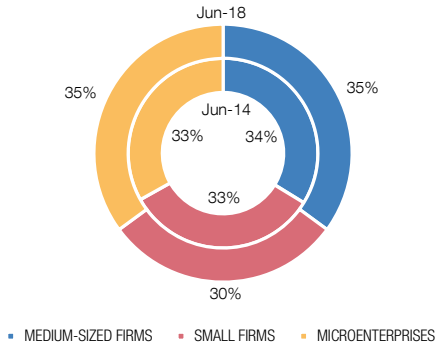
CREDIT TO NON-FINANCIAL FIRMS
Business in Spain, ID

CHART 2.9

A YEAR-ON-YEAR RATE OF CHANGE IN CREDIT, BY SIZE OF FIRM



B BREAKDOWN OF LENDING TO SMEs, BY SIZE OF FIRM



SOURCE: Banco de España.

...period of 2017, both to households and particularly to non-financial corporations, where growth was observed across firms of all sizes

resident private sector, which is €24.6 billion more (13.5%) than in the first half of 2017 (see Chart 2.10.A and B). There was an increase in both new lending to households (€4.2 billion more than in 2017 H1) and, most notably, to non-financial corporations, which were granted loans amounting to €16 billion from January to June 2018 (up 14.2%). Credit relating to new transactions increased for all firms sizes (see Chart 2.10.C and D). As a result of this expansionary trend, both in households and non-financial corporations, the percentage of the stock of total lending represented by new lending increased moderately in the past year, from 15.1% to 17.6%.

New mortgage loans for house purchase rose to €18.6 billion in the first six months of 2018, which is 17.3% more than in the same period in 2017. However, it should be noted that, in annualised terms, this marked increase accounts for only 7.3% of the total volume in this segment of loans, which is considerably lower than in the pre-crisis years, when this percentage exceeded 30%.

The acceptance rate of loan applications was down slightly with respect to the previous year, owing to the behaviour of approved requests

The acceptance rate of loans requested from banks with which firms are not currently operating, in six-month moving average terms, was nearly 31% at end-June 2018, down 1 pp from the rate observed in the same period of 2017. Since early 2009, fluctuations of around 30% have been observed in this rate (see Chart 2.11.A). The underlying changes are largely due to the more negative trend in the number of approvals, rather than to changes in the number of applications. Thus, the year-on-year rate of change in the number of approvals declined until June (–15%), and was more pronounced than the year-on-year decrease observed in the number of applications (–9%). By sector, this overall pattern reflects the overall performance of firms that are not in the construction and real estate sector, while the acceptance rate for the latter has held steady at around 34% since 2015.

Interest rates remained stable, except in the case of lending to larger firms, where they have risen slightly since the beginning of 2018

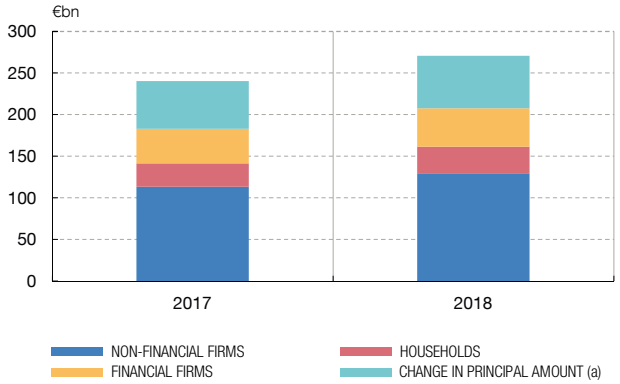
Interest rates on new loans remained stable in the case of households, both in consumer and house purchase loans. Interest rates on loans to non-financial corporations followed diverging paths, depending on the size of the firm. In smaller-sized firms, interest rates continued their downward trend of recent years, while in larger firms, a slight increase has been observed since the beginning of 2018, which has partly closed the gap between the rates applied to loans granted to firms in these size brackets (see Chart 2.11.B).

As regards the conditions for real-estate mortgage loans, Chart 2.11.C shows the changes in the average loan-to-value (LTV) ratio of mortgages to individuals in the last 15 years,

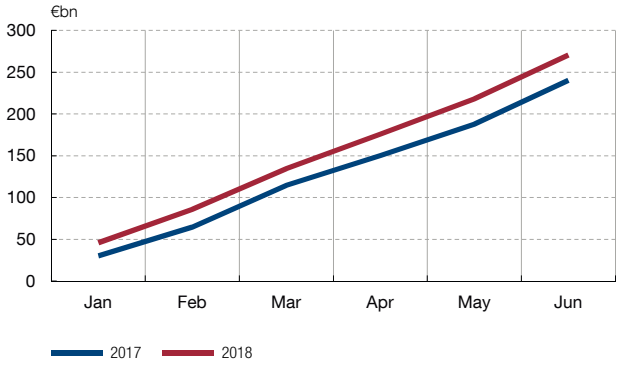
NEW LOANS GRANTED TO THE RESIDENT PRIVATE SECTOR
Business in Spain, ID

CHART 2.10

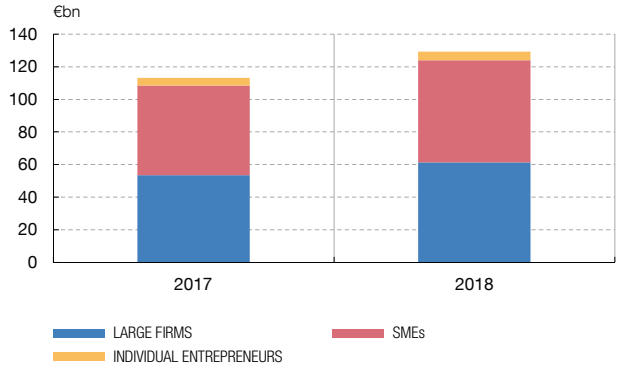
A NEW LOANS IN THE FIRST HALF OF THE YEAR, BY INSTITUTIONAL SECTOR



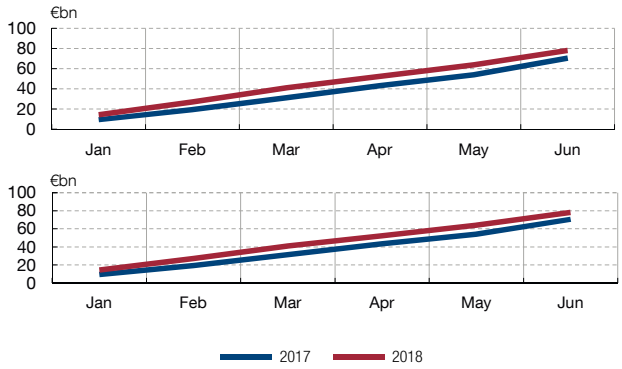
B NEW LOANS GRANTED, ACCUMULATED OVER THE YEAR



C AMOUNT OF NEW OPERATIONS GRANTED TO NON-FINANCIAL FIRMS IN THE FIRST HALF OF THE YEAR, BY SIZE OF FIRM



D NEW LOANS GRANTED, ACCUMULATED OVER THE YEAR, TO LARGE FIRMS (top) AND SMEs (bottom)



SOURCE: Banco de España.

a These are already existing loans in which there is a positive change in the principal drawn down and include those granted to financial firms, non-financial firms and households.

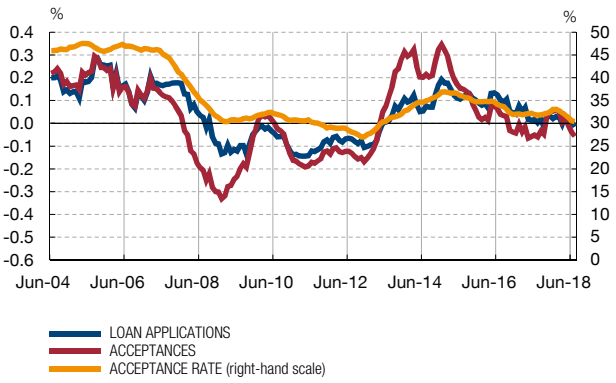
broken down into two series: the simple average of LTVs of all loans and a weighted average, depending on the amount of loan principal. The data refers to the flow of new mortgage loans and can thus be used to approximate the behaviour of the credit standards applied by banks at any given time. Both measures have remained relatively stable since 2016, although at historically high levels.

It is also useful to analyse the distribution of the LTVs (see Chart 2.11.D). This allows the changes in financing conditions to be analysed, that is, to determine whether banks are granting loans with higher risk levels (high LTV ratios). Since the start of the economic recovery, the relative weight of loans with LTVs between 60% and 80% has steadily increased. The fact that new loans are concentrated in this segment partly explains the reported increase of average LTVs (see Chart 2.11.C). The relative significance of these mortgages has increased to the detriment of loans with LTVs of less than 60%. The segment of loans with LTVs of over 80%, considered to be that with the highest risk, has remained stable. An interesting development in the real estate market is the growth observed in the sector of listed real estate investment companies (SOCIMIs, by their Spanish abbreviation). Box 2.3 analysis the main trends in this segment and their potential implications for financial stability.

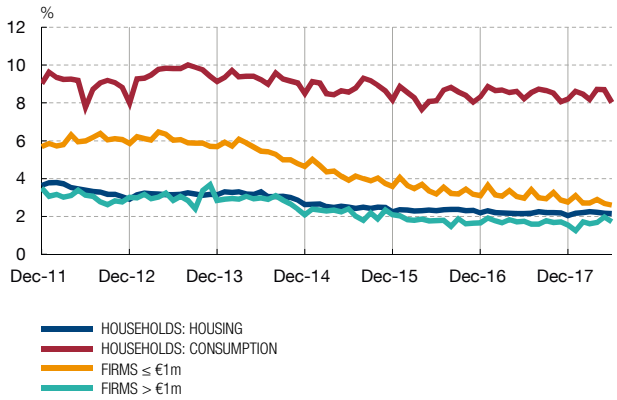
CREDIT CONDITIONS
Business in Spain, ID

CHART 2.11

A ACCEPTANCE RATE OF LOAN APPLICATIONS (a)

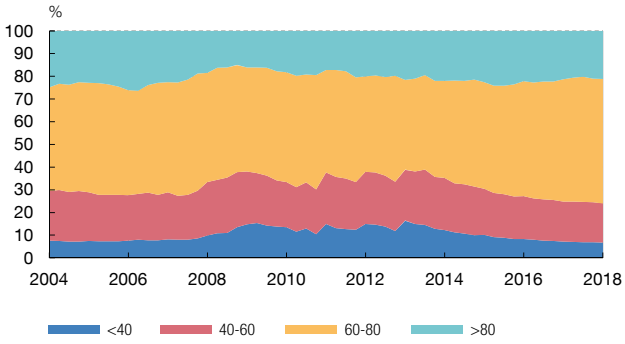


B NEW LOAN INTEREST RATES (APR) (b)



C LOAN-TO-VALUE OF NEW MORTGAGES (c)

D DISTRIBUTION OF LOAN-TO-VALUE RATIO FOR NEW MORTGAGES (d)



SOURCES: Association of Registrars, INE and Banco de España.

a 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.
b 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.
c Include all mortgages to individuals secured with residential property as collateral, according to the information provided by the Association of Spanish Property and Commercial Registrars.
d Mortgages to individuals secured with residential property as collateral.

The substantial decrease in forborne loans with respect to the previous year was widespread across banks

In June 2018, according to individual financial statements, the volume of forborne loans to the resident private sector stood at €79.3 billion, down 23.1% year-on-year. This across-the-board decrease was the result of the sharp decline of forborne loans in non-financial corporations, even though there was a slight increase in the case of households in the same period.

Troubled assets

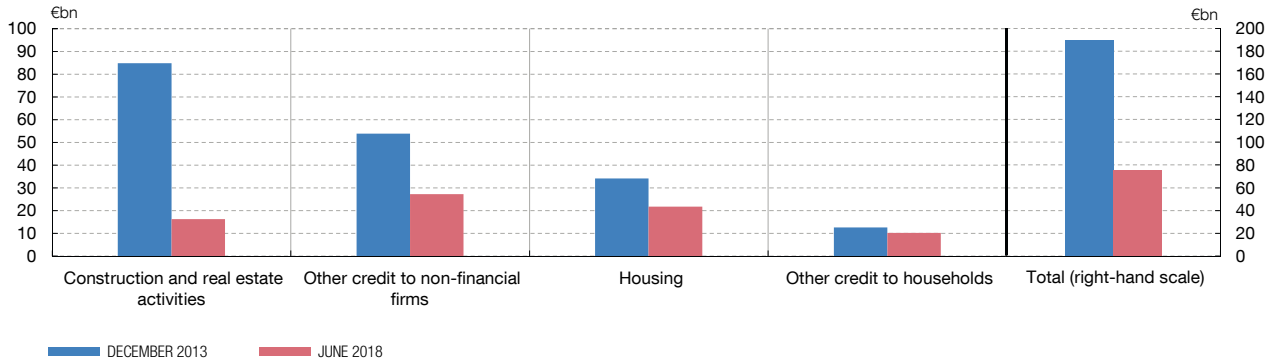
Non-performing loans continued on the downward path seen in recent years, accumulating a decline of 60.2% since December 2013

NPLs decreased by €27.4 billion with respect to the previous year, to stand at €74.8 billion in June (see Chart 2.12.A). This is largely explained by the positive performance of the Spanish economy in the past year, and by the active management of troubled assets by deposit institutions and supervisory pressure. In percentage terms, there was a decrease of 26.7%, higher than that observed in June 2017 (–13%) and December 2017 (–15.5%). Since their peak in December 2013, NPLs have been reduced by more than €114 billion (60.2%). The total volume of NPLs to the resident private sector stood at 2009 levels, to a large extent as a result of their behaviour in the construction and real estate sector.

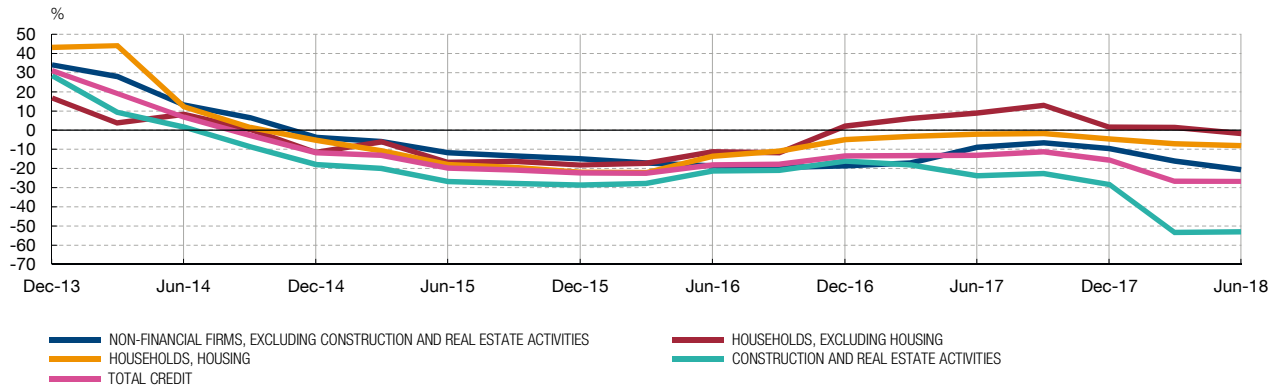
NON-PERFORMING LOANS. RESIDENT PRIVATE SECTOR
Business in Spain, ID. Deposit institutions

CHART 2.12

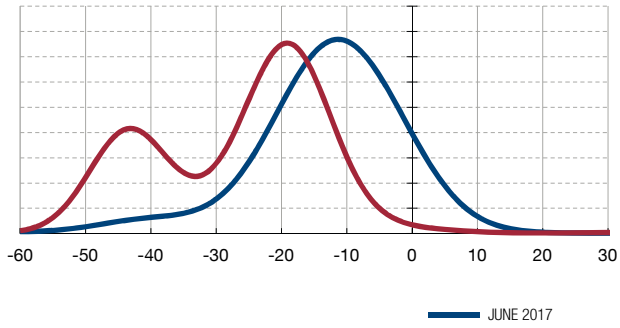
A NON-PERFORMING LOANS BY SECTOR OF ACTIVITY



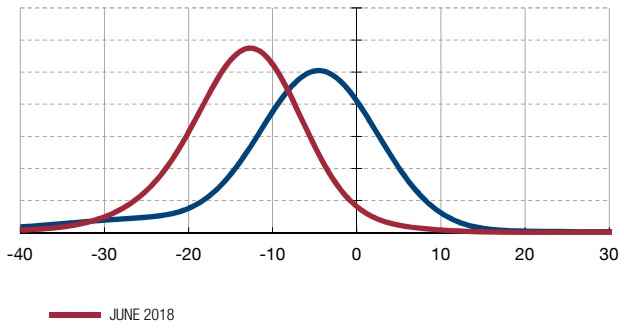
B YEAR-ON-YEAR RATE OF CHANGE IN NPLs, BY SECTOR OF ACTIVITY



C DISTRIBUTION OF THE RATE OF CHANGE OF NPLs (a)



D DISTRIBUTION OF THE RATE OF CHANGES OF NPLs EXCLUDING CONSTRUCTION AND REAL ESTATE ACTIVITIES (a)



SOURCE: Banco de España.

a The graph shows the density function (or frequency distribution) of the NPL ratio for Spanish deposit institutions, weighted by the credit corresponding to each institution. 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.

NPLs declined both in households and non-financial corporations, albeit much more markedly in the latter

NPLs in lending to households decreased by €2.1 billion in the past year, to €31.5 billion in June 2018, representing a year-on-year decline of 6.2 %. Since December 2013, the decrease has amounted to €14.7 billion in absolute terms and 31.9 % in percentage terms. In lending to non-financial corporations, the decrease in NPLs was much more significant. Between June 2017 and June 2018, they declined by €25.2 billion (36.8%). Since their peak in December 2013, NPLs have now decreased by €95.1 billion (–68.7%).

The growth of SOCIMIs *(Sociedades Anónimas Cotizadas de Inversión en el Mercado Inmobiliario),* which are similar to the Real Estate Investment Trusts (REITs) that are well established in other jurisdictions, is one of the most significant recent developments in the Spanish real estate market. The corporate purpose of these firms, which in Spain must be listed in organised markets, is to "acquire and develop urban real estate for rental" (Law 11/2009).[1] In general they focus on acquiring housing and, essentially, commercial real estate, such as offices or shopping malls, mostly assets at the top end of the market and/or in city centre locations (prime segment).

According to data provided by Reuters, there are currently just over 60 SOCIMIs registered in Spain, although the bulk of the activity is concentrated among just a few of those companies. On end-2017 data, SOCIMIs account for around 5% of the assets of real estate firms (developers, construction firms and sector intermediaries).[2] Their asset volume has more than tripled since 2014, coinciding with the recovery in the real estate market.

Various factors have contributed to the growth of SOCIMIs. First, their improved tax regime under Law 16/2012,[3] which grants these firms zero-rated corporate income tax provided certain conditions are met (for example, that the majority of their income comes from real estate rentals and that most of their profit is distributed to shareholders). Second, the strong investment appetite for these vehicles, possibly heightened by the low interest rate environment. In this respect, the proportion of SOCIMIs among new market issuances is notable (they now account for the bulk of new IPOs; see Chart A). Lastly, the possible connection between the sharp price increase in recent years in the prime commercial real estate segment and the strength of these vehicles.

In this setting, a question arises: could the expansion of SOCIMIs pose risks for financial stability? It is important to note that the rapid growth of SOCIMIs' balance sheets derives not only from the acquisition and subsequent rental of real estate assets, but also from the acquisition of fellow SOCIMIs and real estate firms. Partly as a result of these developments, SOCIMIs' capital expenditure (CAPEX) is relatively high, especially when compared with that of traditional real estate sector players (construction firms, for instance).[4]

Despite these tendencies, SOCIMIs' leverage, measured as the ratio of assets to own funds, has remained stable in recent years and, moreover, below that of the other Spanish stock market sectors (see Chart B, which compares SOCIMIs' CAPEX and leverage with the median CAPEX and leverage of the other listed sectors). Accordingly, the favourable environment in which SOCIMIs operate does not appear to have given rise to date to a problem of overindebtedness. However, it should be borne in mind that leverage metrics are sensitive to asset values: were assets to become overvalued, the low leverage reported could be only apparent, while a sudden drop in asset prices would boost leverage. In addition, SOCIMIs could use their real estate portfolios as collateral to raise funding, thus increasing their future leverage. Moreover, a collateral value shock could hamper their CAPEX policies.

1 Law 11/2009 of 26 October 2009 regulating SOCIMIs
2 Estimation based on Central Balance Sheet Data Office (Banco de España) data.
3 Law 16/2012 of 27 December 2012 adopting various tax measures aimed at consolidating public finances and stimulating economic activity.
4 CAPEX is proxied by total investment outflows, according to individual firms' cash flow statements compiled by Reuters.

Chart A
NEW IPOs IN SPAIN
Number of IPOs (a)

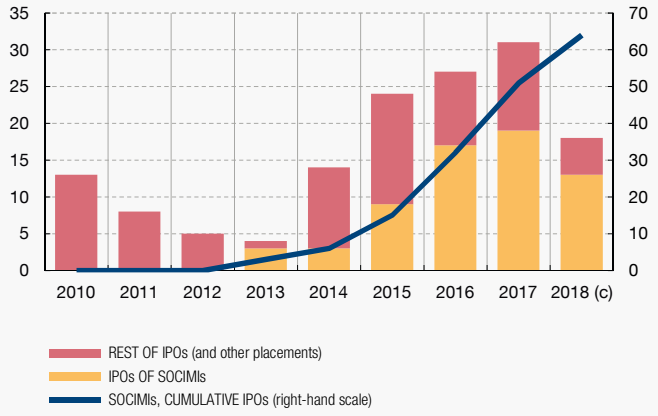
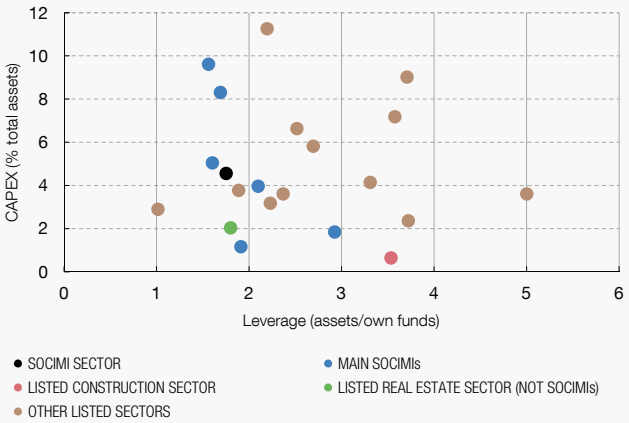


Chart B
LEVERAGE AND CAPEX OF SOCIMIs AND OTHER LISTED SECTORS
December 2017 (b)



SOURCES: Bolsas y Mercados Españoles (BME), Reuters and Banco de España.

a Includes public and subscription offerings.
b Excludes sectors with leverage ratio of more than six to one.
c Information up until September.

Compared with traditional construction sector firms, SOCIMIs obtain more of their funds from capital markets and are less reliant on bank finance. Indeed, on CCR data, at end-2017 only 20% of their assets were funded by loans from Spanish banks (exposure to the sector at that date amounted to €6.7 billion). In general, the investor base of SOCIMIs' shares is predominantly made up of investment funds and similar vehicles, generally based outside Spain (among the large SOCIMIs, almost a third of shareholders are non-residents). As these investors tend to reduce their exposure more rapidly under stress, the cost of funding of SOCIMIs could be more sensitive to changes in market sentiment. By contrast, their lower level of reliance on bank finance could be an advantage, reducing the banking sector's direct links to a business as volatile as real estate. In addition, market issuances facilitate risk monitoring by third parties (investors, credit rating agencies).

To sum up, the SOCIMI sector is expanding significantly, even though the SOCIMIs themselves are still small in size compared with real estate firms overall. In addition, their funding structure is different from that of the traditional sector players, which means that the risk of possible financial stress at SOCIMIs having a significant impact on the Spanish banking sector seems limited at present, given the relatively low level of funding that Spanish banks currently provide to these firms.

Whereas in households, the decrease was more marked in loans for house purchase,…

In household lending, the decrease in NPLs was far more significant in loans for house purchase (–8.2% year-on-year in June 2018) than in those granted for other purposes, basically, but not only, consumer credit (–1.7%), conditioned by the increase in NPLs in lending for the purchase of consumer durables (22.7%). House purchase NPLs fell at a faster pace than in the previous year (2.1% year-on-year), while in other lending to households, the change was significant, with positive rates of change of 9% year-on-year in June 2017.

… in the case of non-financial corporations there was a very significant decline across sectors, especially in construction and real estate,…

By sector of activity (see Chart 2.12.B), in lending to non-financial corporations, NPLs declined by 53% in construction and real estate activities, that is, the volume of NPLs in this sector decreased by €18.2 billion. As mentioned earlier, such a significant decline was due to several factors, including the sale by some banks of their NPL portfolios, which have consequently been removed from their respective balance sheets. Other sectors have also seen a marked decline in the past year, of €7.1 billion, or 20.6% in percentage terms.

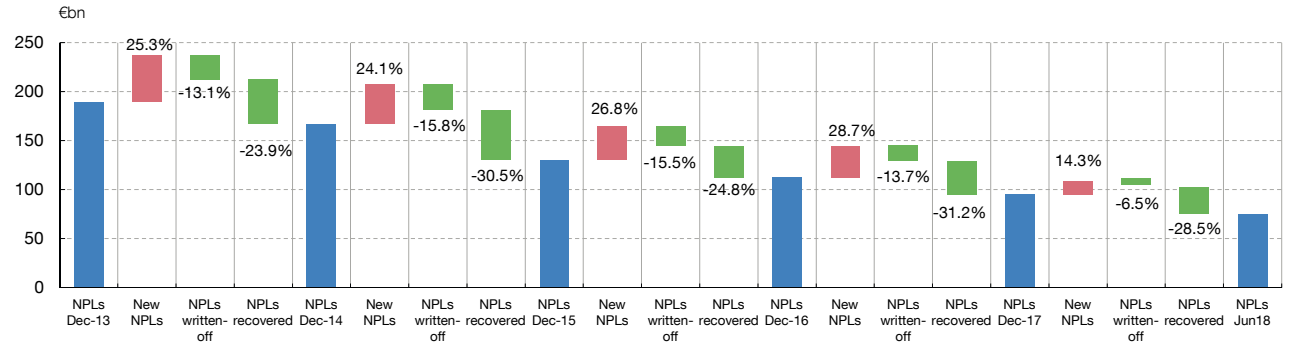
… largely owing to the sale by certain banks of their troubled loan portfolios in these sectors

The sale by some banks of their NPL portfolios in the real estate and construction sector led to markedly uneven behaviour across banks and in the case of NPLs (see Chart 2.12.C). If these sectors of activity are excluded from the analysis, a greater degree of uniformity can be observed in the period. In any event, there has been a shift to the left-hand side of the distribution (larger decreases in NPLs), compared with that observed in June 2017 (see Chart 2.12.D).

In the first half of 2018, a smaller quantity of loans were classified as non-performing than in the same period the previous year, and there were also more recoveries

Chart 2.13 shows the NPL developments from December 2013 to June 2018, in terms of additions and removals. In the first half of 2018, a total of €13.6 billion was classified under new NPLs, representing a change of –15.5% with respect to the first six months of the previous year, and accounting for 14.3% of total NPLs in December 2017. Although the weight of new NPLs in the total (in annualised terms) has remained relatively stable in recent years, it should be noted that these additions continue to decline in absolute terms. With respect to removals, a total of €27.1 billion are no longer classed as NPLs on the balance sheets of deposit institutions in Spain, largely owing to recoveries.

FLOW OF RESIDENT PRIVATE SECTOR NPLs BETWEEN DECEMBER 2013 AND JUNE 2018 (a) CHART 2.13
Business in Spain, ID



SOURCE: Banco de España.

a Shown beside each bar is the percentage each item represents of the total NPLs at the beginning of the period. NPLs recovered include non-performing loans that become performing again, foreclosed assets and NPLs sold to third parties. Note that the last period corresponds to six months and not to a whole year as in the rest of the chart.

As a result of developments affecting the numerator and denominator, the NPL ratio of the resident private continued on a downward trend,…

The significant decrease in NPLs, despite the reduction in new loans, has translated into the NPL ratio decreasing further, continuing the trend observed in recent years. Specifically, the NPL ratio of lending to the resident private sector in business in Spain stood at 6.4% in June 2018, down 2.1 pp in the past year (see Chart 2.14.A). In percentage points, this year-on-year decrease was 1.1 pp in June 2017 and 1.4 pp in December 2017, showing a faster pace of decline in recent quarters. From the highest value of the series, the NPL ratio of the resident private sector has fallen by 7.5 pp.

…, more pronounced in non-financial corporations than households

By sector (see Chart 2.14.B), the year-on-year decrease was far more pronounced in non-financial corporations (4.5 pp, to 9% in June 2018) than in households (5.1% at the last available date, and 0.3 pp higher 12 months earlier). In household lending, the NPL ratio of loans for house purchase fell by 0.3 pp in the past year to 4.3%, while that of lending for other purposes decreased by 0.6 pp to 8.6%, in the same period. Therefore, it has been observed that the segment of lending with the highest profit margin, that of loans for purposes other than housing, including consumer credit, also has the highest NPL ratios. Box 2.2 analyses in greater detail the NPL ratios by components of consumer credit.

In the case of non-financial corporations, and in line with the notable decrease in non-performing loans, the ratio fell more sharply in the construction and real estate sector

In the case of non-financial corporations, the NPL ratio fell more sharply in loans for construction and real estate activities, by more than 10 pp to 12.7% in June 2018. In loans for other purposes, the NPL ratio fell to a lesser degree, by 1.9 pp year-on-year to 7.7% at the last available date. The aforementioned active management (sale) by banks of NPLs in this sector and supervisory pressure have undoubtedly influenced developments in its NPL ratio in the past year.

Although the ratio fell across non-financial corporations of all sizes, the largest decrease was in SMEs

The NPL ratio decreased across all sizes of non-financial corporations (see Chart 2.15.A). The largest decrease was observed in SMEs (–6.9 pp) and, within this category, in the smallest firms (microfirms), with a year-on-year decline of 8.3 pp. Thus, SMEs had an NPL ratio of 11.7% in June 2018, while that of large firms decreased by 2.5 pp to 6.1%. However, despite the larger reduction in the NPL ratio of the smallest firms, a firm's size and its NPL ratio continue to be inversely related (see Chart 2.15.B).

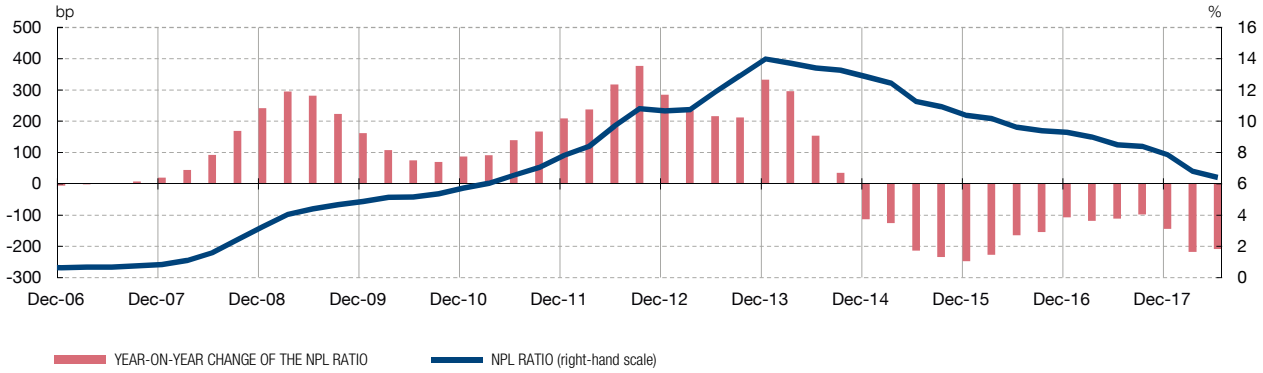
The growth of the economy, along with the active...

If the favourable economic conditions and supervisory pressure are maintained, and banks continue to sell their stock of non-productive assets, the NPL ratio can be expected to

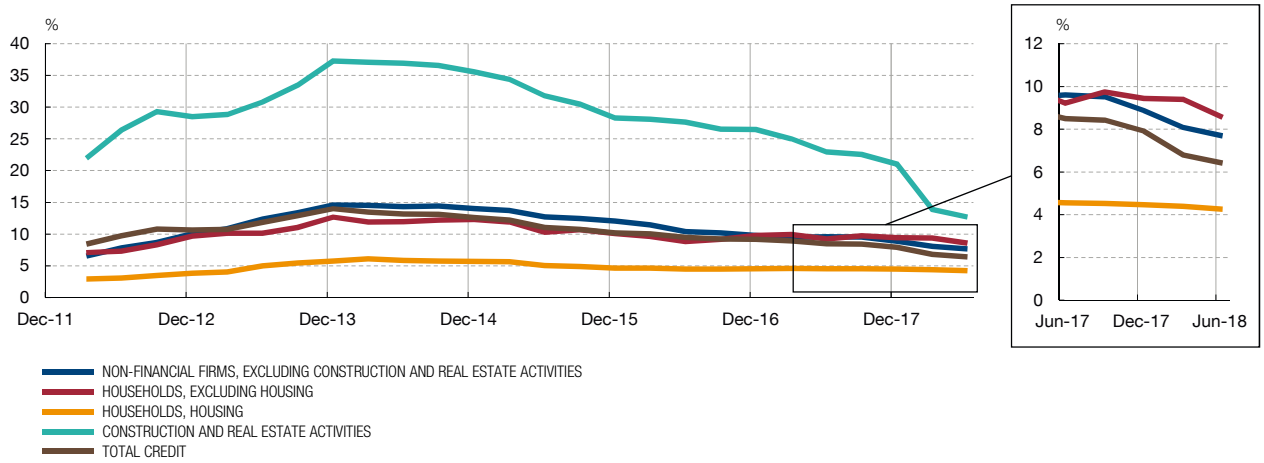
NPL RATIO. RESIDENT PRIVATE SECTOR
Business in Spain, ID. Deposit institutions

CHART 2.14

A NPL RATIO



B NPL RATIO, BY SECTOR OF ACTIVITY



SOURCE: Banco de España.

...management of troubled assets by banks and supervisory pressure will allow NPLs to continue to be reduced

continue to decrease. On this basis, if banks manage to sell all their NPL portfolios from the construction and real estate sector, the NPL ratio would fall to levels close to 5%. Moreover, an internal model developed for the purpose of forecasting the NPL ratio of credit to the resident private sector, based on the Spanish economy's main macroeconomic variables, estimates that by 2020 the value of this ratio will stand at around 4%.[1] It should be noted that this forecast is based on the historical relationship between the NPL ratio and macroeconomic variables and does not include the NPL portfolio sales forecast. In fact, the model's forecast for June 2018 was 50 bp higher than the current NPL ratio, which shows an improvement resulting from the active management of troubled asset portfolios. In short, NPLs have continued on the path of recent years, declining at a faster pace in the last 12 months.

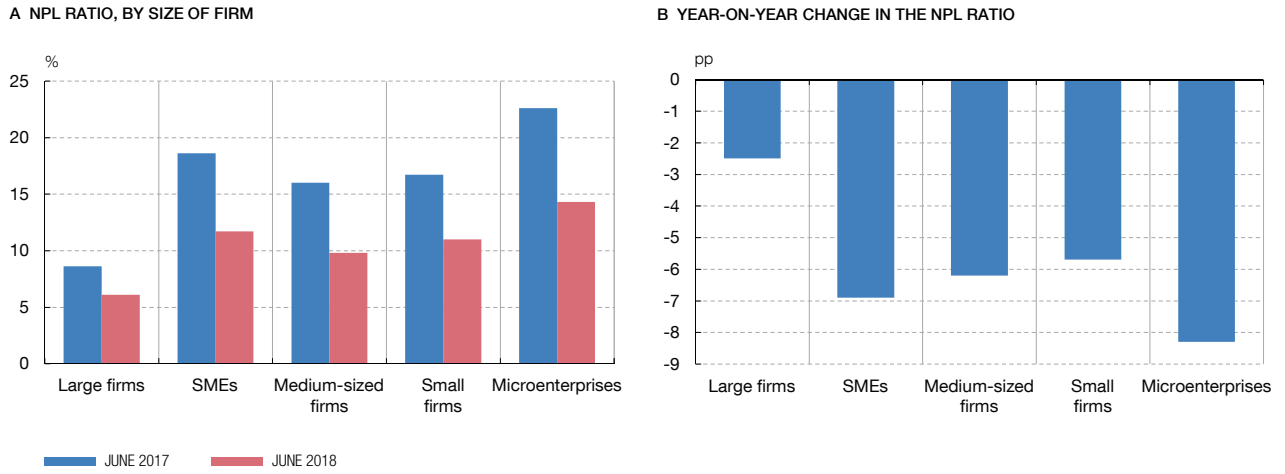
Foreclosed assets decreased further in 2017 and their decline is expected to continue this year

In 2017, foreclosed assets or assets received in payment of debts from the activity of banks in Spain continued to decrease. Chart 2.16 shows the changes in their gross book value in recent years. In this chart, the trend followed since 2013, showing a gradual improvement in the sale of foreclosed asset by banks can be observed. The slight fall in

1 See the 2017 Annual Report of the Banco de España https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesAnuales/InformesAnuales/17/Descargar/Fich/Inf2017.pdf.

NPL RATIO OF NON-FINANCIAL FIRMS
Business in Spain, ID

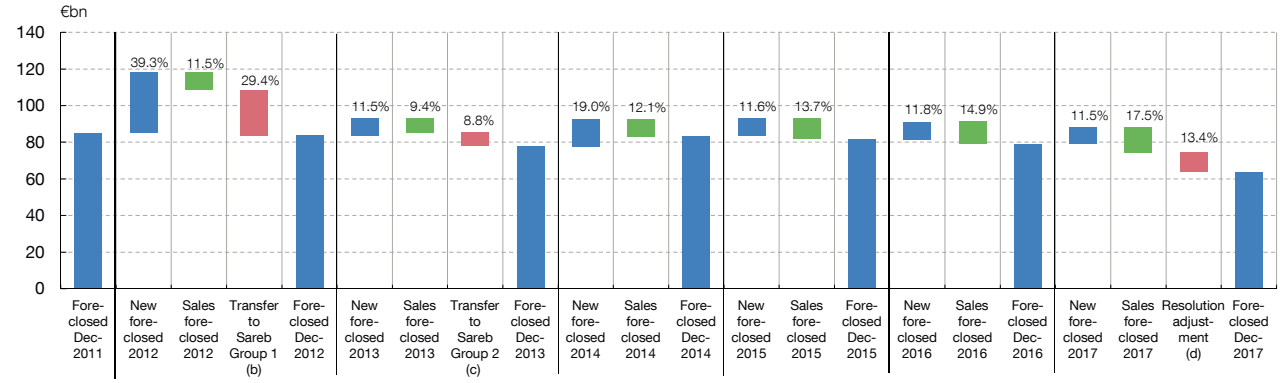
CHART 2.15



SOURCE: Banco de España.

FORECLOSED ASSETS BETWEEN DECEMBER 2011 AND DECEMBER 2017 (a)

CHART 2.16



SOURCE: Banco de España.

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) and Banco de Valencia (currently integrated in La Caixa).
c Group 2 institutions were BMN (currently integrated in Bankia), Liberbank, Caja3 (currently integrated in Ibercaja) and CEISS (currently integrated in Unicaja).
d The adjustment of the gross book value of Banco Popular Español's foreclosed assets corresponds to their value net of provisions at the date of resolution (June 2017).

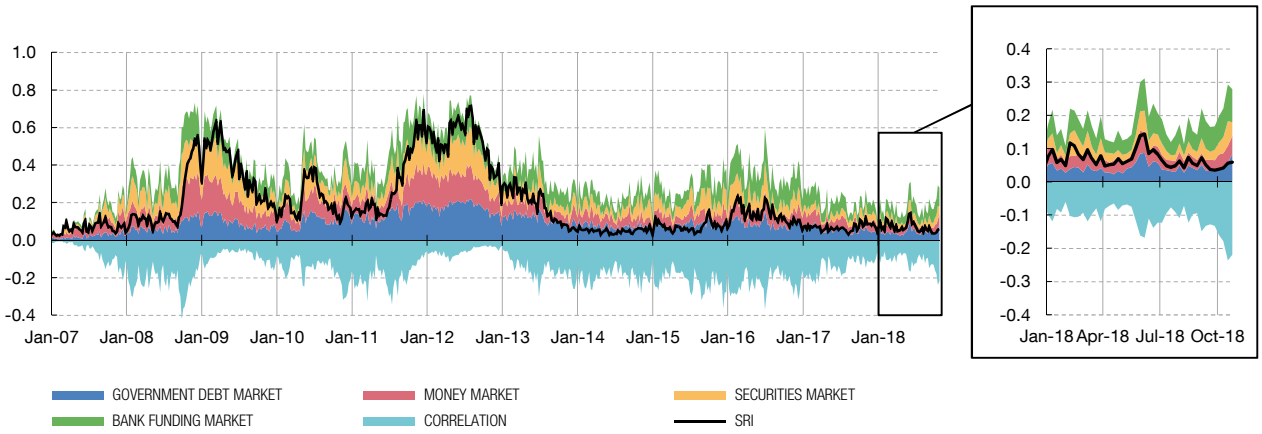
new foreclosed assets has contributed to reducing the total stock of such assets, which amounted to a total of nearly €64 billion at end-December 2017. Looking ahead, confirmation of the recently announced sales of foreclosed asset portfolios by banks would almost halve the volume of these assets on banks' balance sheets.

2.1.2 SYSTEMIC RISK

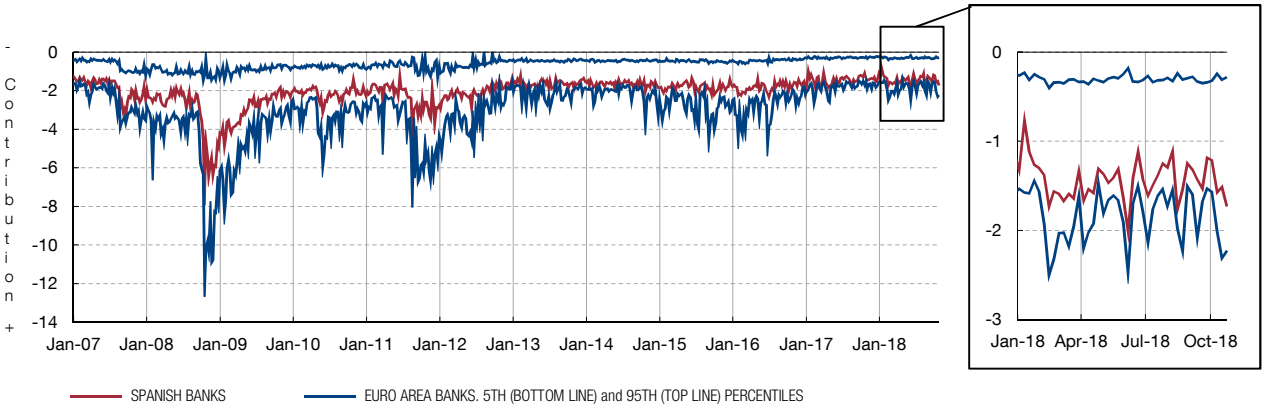
So far this year, the SRI has increased on two occasions, albeit with a limited impact in terms of value and time

So far in 2018, the systemic risk indicator (SRI), which presents in a single indicator the level of stress in the financial markets, has increased twice, although with a limited impact in terms of value and time on both occasions (see Chart 2.17.A). In the first week of February 2018 it rose slightly due to the sharp price adjustments and to the higher US stock market volatility and its spread by contagion to the Spanish markets. The second increase, somewhat higher than the first, but equally subdued, took place at the end of May, mainly as a result of the political uncertainty in Italy. Since then, the SRI has held at low levels.

A SYSTEMIC RISK INDICATOR (SRI) (a)



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



SOURCES: Datastream 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. The sample used in the CoVaR calculation comprises a total of 33 listed Spanish and euro area institutions.

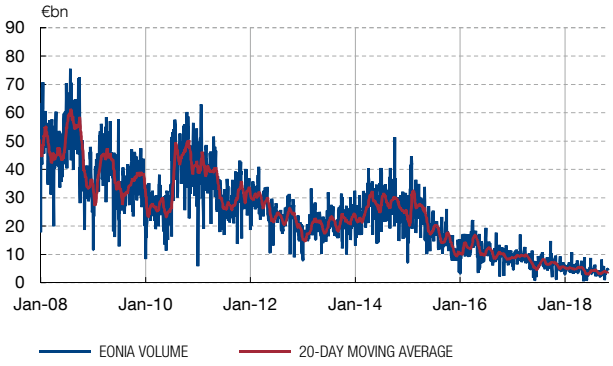
The contribution of Spanish banks to the systemic risk of the euro area as a whole is quantified by means of a model known as CoVaR.[2] Following episodes of systemic alert recorded during the crisis, the average CoVaR of Spanish banks has since remained at much lower levels (see Chart 2.17.B). Likewise, at European level, the contribution to systemic risk from the banks that could be considered as most systemically important has declined after the crisis. However, the fact that Spanish banks have moved nearer to the bound delimited by the 5th percentile of euro area banks indicates that the contribution to systemic risk from Spanish banks has increased in relative terms with respect to the rest of the European system, although in absolute terms its contribution has decreased. Since the previous FSR there have been two sporadic rises mainly affecting the 5th percentile of euro area banks. These increases arose from certain upsurges in market volatility in June and August 2018 relating to the situation in Italy and Turkey, which appear to have had a greater impact on European banks than on Spanish banks.

2.1.3 FUNDING RISK

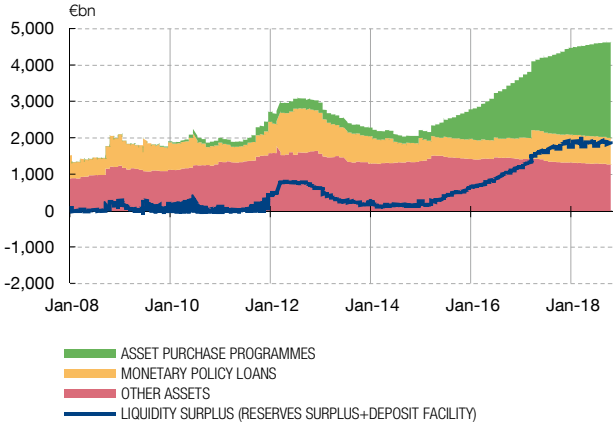
The euro area interbank markets have continued to show very low activity, particularly in the unsecured segment, as evidenced by the EONIA trading volume, which since

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

A EONIA TRADING VOLUME

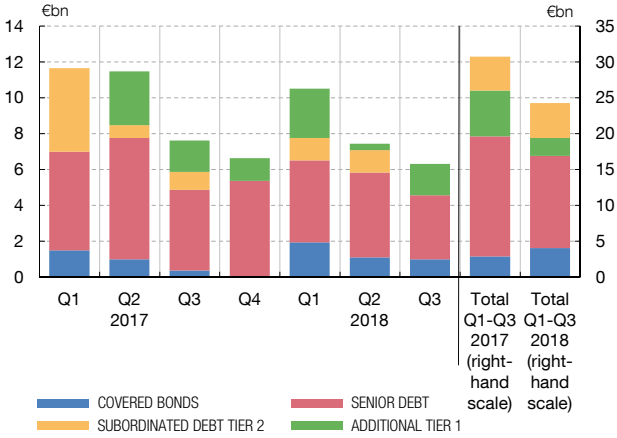


B EUROSYSTEM BALANCE SHEET AND LIQUIDITY SURPLUS



C OUTSTANDING AMOUNT PROVIDED THROUGH EUROSYSTEM TENDERS

D MAIN ISSUES OF SPANISH DEPOSIT INSTITUTIONS IN MEDIUM- AND LONG-TERM WHOLESALE MARKETS (a)



SOURCES: Bloomberg, Dealogic and Banco de España.

a Includes covered bonds, senior debt, subordinated debt tier 2 and additional tier 1 issues. Retained issues are not included.

Interbank market activity in the euro area remains very low, as a result of which the EONIA index will be replaced by the euro short-term rate (ESTER) from October 2019

mid-2016 has held at very low levels and has continued to fall in the past six months (see Chart 2.18.A). Similarly, the Spanish interbank market continues to post very low volumes of activity.

The low EONIA trading volume means that the index will no longer meet the criteria of Regulation (EU) 2016/1011 of 8 June 2016 on benchmarks and may not be used as from 1 January 2020 as a benchmark index for trading in financial instruments, loan or mortgage agreements, or to measure the profitability of investment funds. For this reason, starting in October 2019, the ECB shall publish an alternative interest rate known as the "ESTER" (euro short-term rate). Both indices are based on unsecured transactions, but differ in important ways. The ESTER will be calculated using individual unsecured overnight deposit transactions on the European money market that 52 banks must report to the ECB in accordance with the money market statistical reporting (MMSR) regulation, while the EONIA is computed as a weighted average of all overnight unsecured lending interbank transactions submitted in the form of voluntary contributions by a panel of banks.

In recent years, the Eurosystem has substantially increased its funding to banks, while interbank market trading has been limited. At the date of this report going to press

(October 2018), the Eurosystem had provided liquidity amounting to €3,363 billion through asset purchase programmes (€2,630 billion) and refinancing operations (€733 billion), generating a high level of surplus liquidity of €1,870 billion in October 2018. Chart 2.18.B shows the developments relating to these forms of Eurosystem liquidity provision.

The Eurosystem's refinancing operations have remained stable since March 2017. They relate to a series of four extraordinary targeted longer-term operations with a four-year maturity, known as TLTRO II, and amounting to €725 billion. They were issued quarterly between June 2016 and March 2017 at an interest rate which could be as low as the deposit facility rate (–0.4%). The final rate depends, for each bank, on the behaviour of the volume of its portfolio of loans to firms and households, excluding those for house purchase, between February 2016 and 31 January 2018. The maximum rate applicable is that of main refinancing operations (0%). These operations have provided banks with stable, long-term funding with highly favourable conditions.

The Spanish banking sector receives 22% of the liquidity provided by the Eurosystem

Spanish banks have continued to have considerable recourse to Eurosystem funds and to show limited interbank activity. The liabilities of Spanish banks vis-à-vis the Eurosystem practically all derive from TLTRO II operations and have remained broadly unchanged since end-March 2017, at around €168 billion. This amount represents 22% of the total liquidity received by all Eurosystem banks (see Chart 2.18.C) and slightly more than 15% of Spain's GDP. The TLTRO-II operations will mature between June 2020 and March 2021, although banks may make partial or total early repayments on a quarterly basis as from June 2018, provided that at least two years have elapsed since the funds were granted.[3] Banks must address these maturities either through the divestment of liquid assets (including the reserves with the central bank) or refinancing on the financial markets or with Eurosystem funding.

Regular one-week and three-month lending operations will continue to be executed at a fixed rate with full allotment of banks' requests for liquidity, only subject to having sufficient collateral, at least until the end of the last reserve maintenance period of 2019. Banks are thus assured of an ample period of time during which they will receive all the liquidity they request.

Spanish banks have reduced their issuance activity in 2018 to date with respect to the same period a year earlier

With regard to long-term funding, Spanish banks reduced their issuance activity in the first three quarters of 2018 compared with the same period of 2017 (see Chart 2.18.D). As regards the instruments issued, only covered bonds increased relative to the previous year (which had seen a significant decrease compared with the amounts issued in 2016). Senior debt issuance decreased relative to 2017, when issues of this type of debt had grown significantly, as Spanish banks began to issue senior non-preferred debt (a type of instrument that they can use to meet MREL requirements). Finally, the issuance of debt eligible as additional Tier 1 capital decreased with respect to 2017, whereas the issues of debt eligible as Tier 2 capital remained relatively stable.

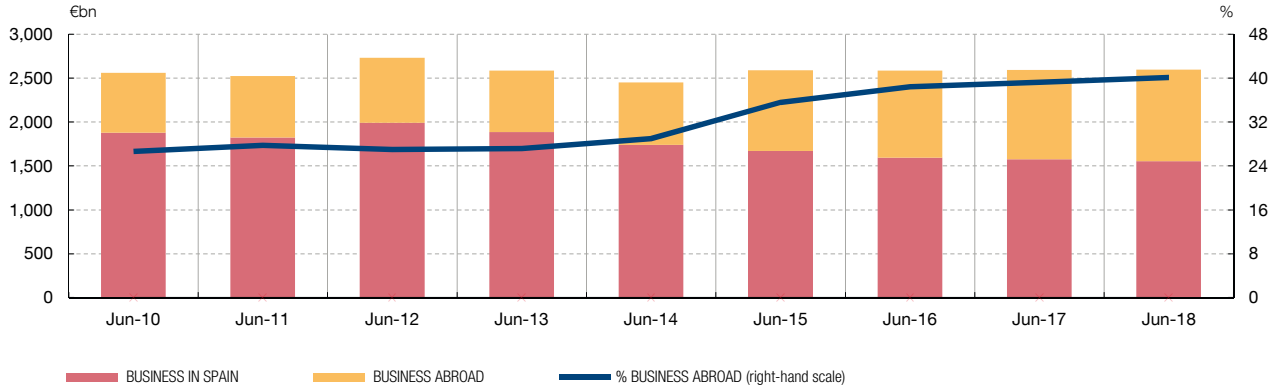
At consolidated level, deposits fell by 1.3% year-on-year despite the favourable behaviour of private-sector deposits, which increased by 0.6%

At consolidated level, for Spanish deposit institutions overall, Chart 2.19 shows the diverging developments in total deposits in Spain, which fell by 1.3% year-on-year relative to the same month of the previous year, while deposits abroad grew by 2.5%. Thus, deposits abroad, as a proportion of the total, increased to 40.1% in June 2018. However, private-sector deposits on the consolidated balance sheet of Spanish deposit institutions

3 On 27 June loans amounting to some €11 billion were repaid early by 41 counterparty institutions in the euro area.

INTERNATIONAL EXPOSURE. FINANCIAL LIABILITIES. DEPOSITS
Consolidated data

CHART 2.19

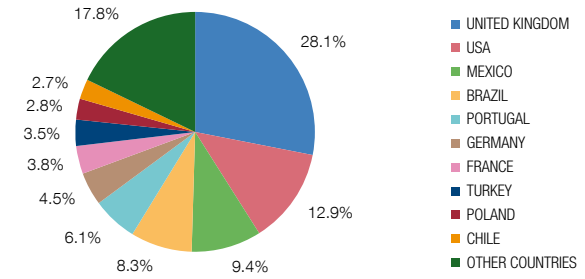


SOURCE: Banco de España.

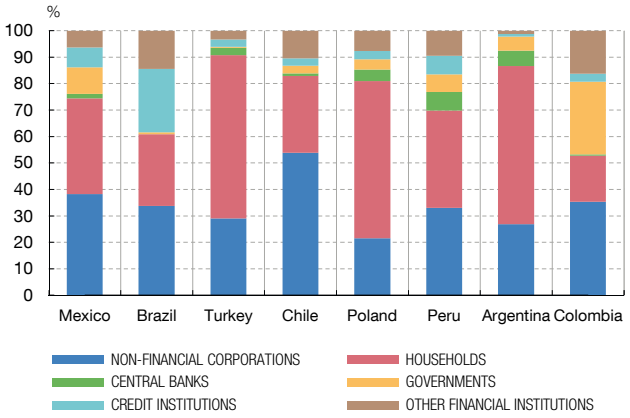
INTERNATIONAL EXPOSURE. GEOGRAPHICAL BREAKDOWN OF DEPOSITS
Consolidated data

CHART 2.20

A GEOGRAPHICAL BREAKDOWN OF DEPOSITS



B GEOGRAPHICAL BREAKDOWN OF DEPOSITS BY COUNTERPARTY
Emerging countries



SOURCE: Banco de España.

grew by 0.6% year-on-year to €1,972 billion in June 2018 (see Annex 1). This increase was due to the year-on-year growth of 2% in deposits of the resident private sector in Spain, while deposits abroad fell by 1.6% (partly as a result of a widespread appreciation of the euro exchange rate against other currencies).

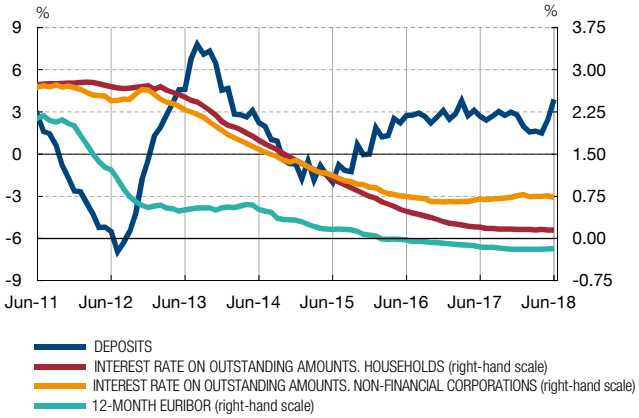
Chart 2.20.A shows the geographical breakdown of deposits abroad of Spanish banks with significant international exposure. As the graph shows, the activity abroad of Spanish banks is concentrated mainly in five countries which account for nearly 65% of deposits abroad: United Kingdom (28.1%), United States (12.9%), Mexico (9.4%), Brazil (8.3%) and Portugal (6.1%).

Chart 2.20.B also shows, for the main emerging countries in which Spanish banks are present, the geographical breakdown of deposits which, generally speaking, come mainly from household and non-financial corporations. Notable in Chile is the importance of funding received from non-financial corporations (more than 50% of the total), while in Turkey, Poland and Argentina, funding from households exceeded 50% of total funding.

RETAIL FUNDING
Deposit institutions, ID

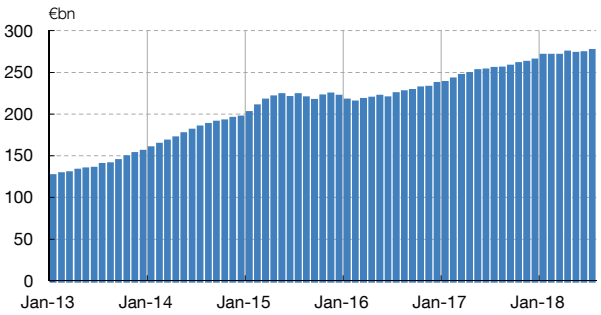
CHART 2.21

A CHANGE IN DEPOSITS FROM HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS, AND INTEREST RATES ON OUTSTANDING AMOUNTS

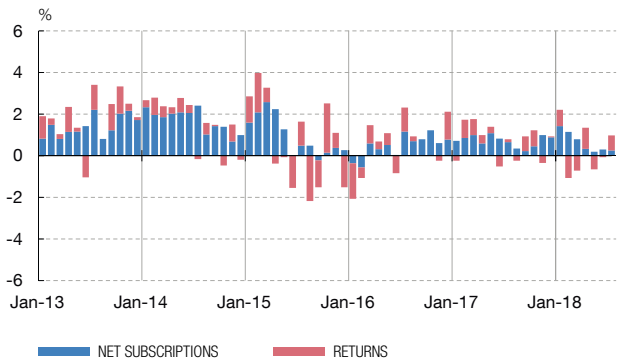


B LOAN-TO-DEPOSIT RATIO IN RELATIVE TERMS (a)

C NET ASSET VALUE OF INVESTMENT FUNDS



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 from households and non-financial corporations plus debt securities of deposit instituions held by households and non-financial corporations.

In Mexico and Peru, the proportions of funding from households and from non-financial corporations are more even. Lastly, in Brazil and Colombia, funding from credit institutions and general government, respectively, plays a significant role.

Retail deposits from non-financial corporations and households increased in the period, while a stabilising trend was observed in interest rates…

Deposits taken from the resident private sector (restricting analysis to households and non-financial corporations) by deposit institutions in Spain, analysed using the data from individual financial statements, grew by 3.9% in the year. This rate is somewhat higher than that observed 12 months earlier (2.7%) and, continues the upward trend that began in mid-2015. The yield on deposits from households and non-financial corporations has steadied in the past 12 months, in line with the stabilisation of the decline of the Euribor (see Chart 2.21.A). Nevertheless, owing to the low yields, sight deposits have continued to increase at the expense of time deposits, as has been observed in recent years, so that time deposits have decreased from 53.4% of total deposits in December 2013 to 19.6% in June 2018.

…, which, along with the fall in lending, led to a further decline in the loan-to-deposit ratio of these sectors

Owing to the downward trend in lending, which was more marked in this period as a result of developments in the construction and real estate sectors, and the opposite trend in the volume of deposits, the loan-deposit ratio has continued to move on the declining course of recent years. This ratio is already less than half of its value in October 2007, when the peak of the whole series was recorded (see Chart 2.21.B).

The net assets of investment funds continued their upward trend initiated at the end of 2012, against a background of low interest rates and low returns on assets (see Chart 2.21.C). In July 2018, the total net assets of investment funds amounted to almost €275 billion, having increased by more than €11 billion in the year so far. Net subscriptions rose in all months of the year, while the returns on investment funds performed less evenly, with positive contributions (three months of the year) and turning negative (four months), as shown in Chart 2.21.D.

2.2 Profitability

In the first half of the year the Spanish banking sector posted a profit of more than €10,000 million, up 12.5% on 2017

In the first half of 2018, Spanish deposit institutions as a whole recorded consolidated profit attributable to the parent of slightly more than €10,000 million. This amount represents growth of 12.5% with respect to the profit for the first half of 2017 (see Annex 2). The higher profit reflected growth of 7 bp in the return on assets (ROA) of the Spanish banking sector, from 0.50% at June 2017 to 0.57% at June 2018. Along these same lines, the return on equity (ROE) grew by 0.5 pp from 7.1% at June 2017 to 7.6% at June 2018.

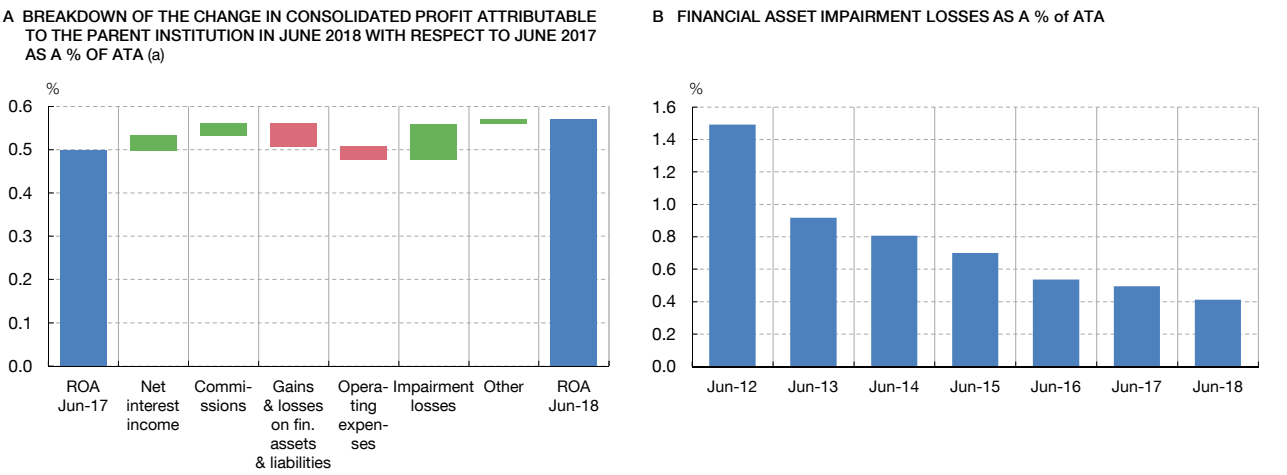
As in previous years, the main determinant of the profit improvement was the decrease in impairment losses

Following the trend of the last few years, the main determinant of this improvement in profit was the year-on-year decrease in impairment losses, which fell by 18.1% in the past year. At the top of the income statement, net interest income increased slightly (0.1%), but the fall of 1.7% in average total assets from June 2017 to June 2018 meant that its contribution to the return on average total assets (ATA) rose by 3 bp, as shown by Chart 2.22.A.

In the current low interest rate environment, banks have focused somewhat more on the provision of banking services, with the result that fees and commissions increased by 2.3% in the past year (see Annex 2). In keeping with the pattern of recent years, gains on financial assets and liabilities expressed as a proportion of ATA decreased by 4 bp to 0.16%. As a result of these developments, gross income fell slightly by 1.8% from June 2017 to June 2018. Operating expenses at consolidated level increased by 0.4%, so net operating income fell proportionately more than gross income, being down by 3.9% year-on-year. Finally, as shown by Chart 2.22.B, impairment losses fell notably in the past year, in line with the trend of the last six years, and their weight in average total assets dropped to 0.41%.

CONSOLIDATED PROFITABILITY
Deposit institutions

CHART 2.22

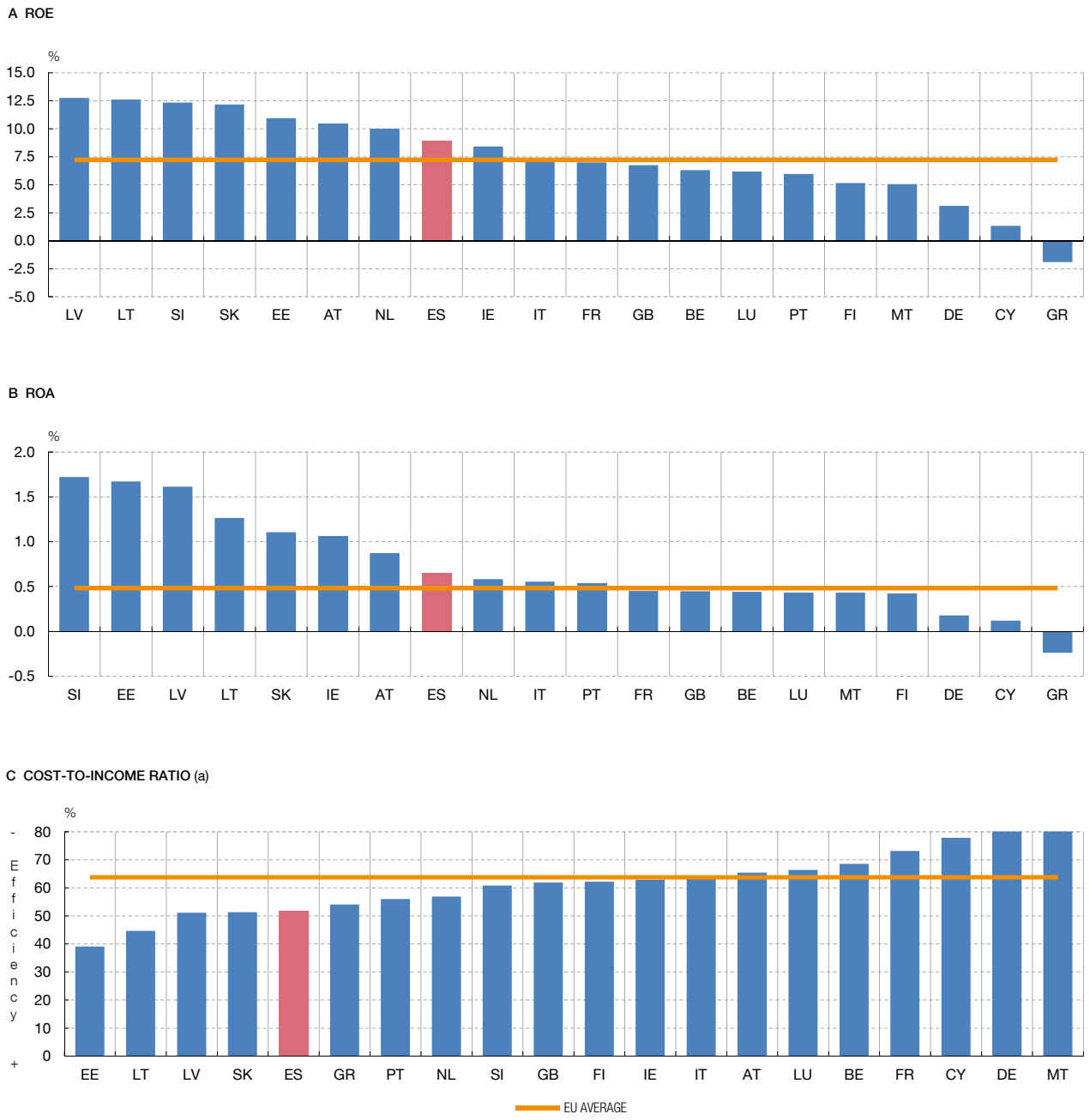


SOURCE: Banco de España.

a The red (green) colour of the bars indicates a negative (positive) contribution of the corresponding item to the change in consolidated profit in June 2018 with respect to June 2017.

PROFITABILITY. EUROPEAN COMPARISON.
SSM COUNTRIES AND UNITED KINGDOM. JUNE 2018

CHART 2.23



SOURCE: EBA.

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

The profitability and efficiency of the Spanish banking sector stand above the European average

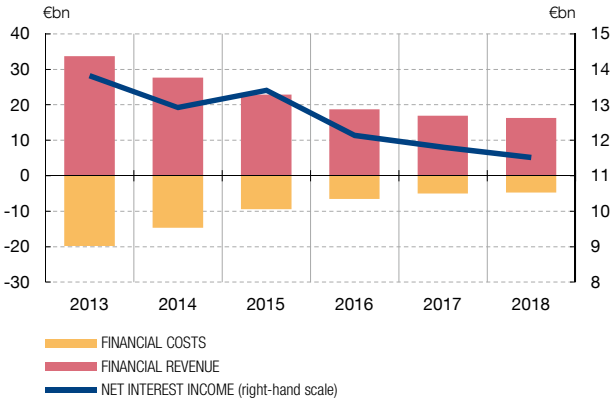
Using European Banking Authority data as at June 2018,[4] Chart 2.23 presents a European comparison of three profitability measures at consolidated level: return on equity, return on assets and cost-to-income ratio. Charts 2.23.A and 2.23.B show that the ROE and the ROA of the Spanish banking system are above the European averages and those of the main European countries. Finally, Chart 2.23.C shows that the cost-to-income ratio of Spanish banks is one of the lowest (i.e. best) in Europe.

4 See http://www.eba.europa.eu/risk-analysis-and-data/risk-dashboard

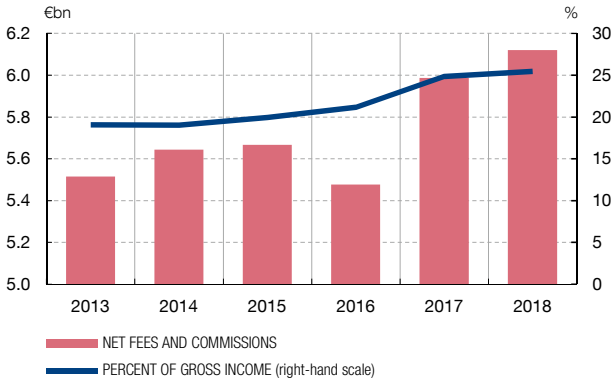
PROFITABILITY
Business in Spain, ID

CHART 2.24

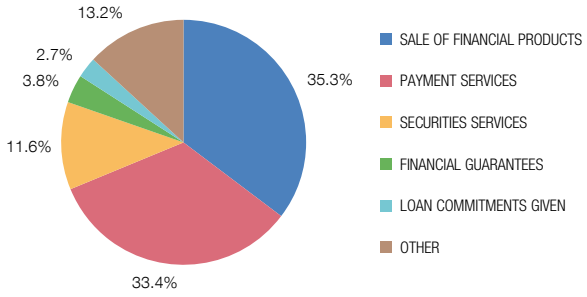
A FINANCIAL REVENUE AND COSTS AND NET INTEREST INCOME



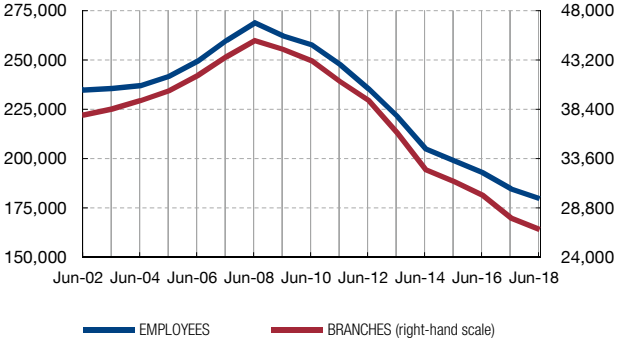
B NET FEE AND COMMISSION INCOME. AS AMOUNT AND PERCENT OF GROSS INCOME



C BREAKDOWN OF NET FEE AND COMMISSION INCOME. JUNE 2018



D NUMBER OF EMPLOYEES AND BRANCHES. 2002-2018



SOURCE: Banco de España.

The profitability of business in Spain improved slightly with respect to the previous year, although it was below overall consolidated profitability

In the first half of 2018, the profitability of business in Spain, analysed through the individual financial statements reported by banks, was somewhat lower than that of overall consolidated operations. Compared with the first half of 2017, the return on assets increased slightly from 0.53% at June 2017 to 0.55% at June 2018, and the same was so for the return on equity, up from 5.9% at June 2017 to 6.2% at June 2018. As in overall consolidated activity, the main determinant of this year-on-year improvement was the significant reduction in impairment losses, which fell by nearly 47% in the past year.

Net fees and commissions increased in amount and as a proportion of gross income in both of the past two years

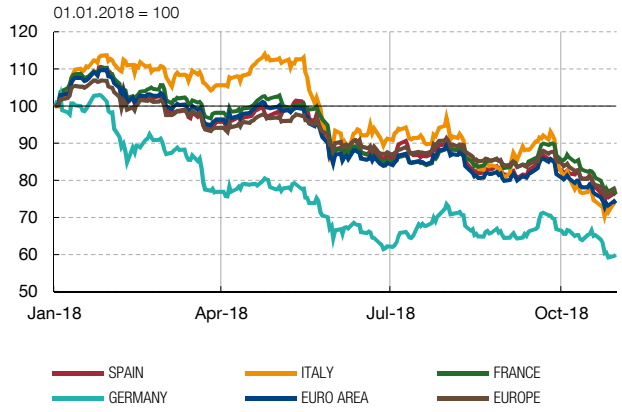
Chart 2.24.A shows a further fall in net interest income due to the fact that interest revenue decreased by more than interest expenses. This continued fall was offset because banks switched a portion of their business to the provision of services which generated fees and commissions. Thus Chart 2.24.B shows the increase in net fees and commissions in the past two years, both in absolute amount and as a proportion of gross income.

Analysis by type of fees/commissions shows that the main ones are those associated with the sale of financial products and those derived from payment services, which together represent nearly 70% of net fees and commissions at June 2018 (see Chart 2.24.C). They are followed by fees/commissions for securities services, which represent more than 11%, and those associated with financial guarantees (less than 4%) and with loan commitments (less then 3%), while other fees/commissions account for nearly 13%.

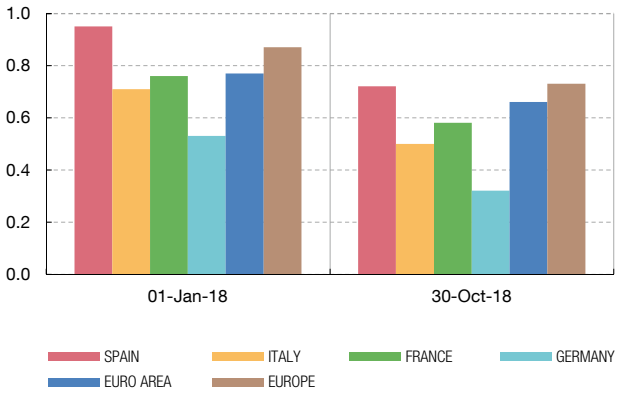
MARKET INFORMATION
European comparison

CHART 2.25

A BANKING-SECTOR STOCK MARKET INDICES



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



SOURCE: Datastream.

In 2018 the number of staff and branches continue to decrease, with year-on-year falls of around 3% and 4%, respectively. The process of capacity adjustment of the Spanish banking system has now been going on for 10 years, and the reduction of branches with respect to the peak in 2008 exceeds 40%, while that of staff exceeds 32% (see Chart 2.24.D). The ongoing pressure on margins means that banks need to continue adjusting their operating expenses by harnessing technological advances in the distribution of financial products, without neglecting the new risks (operational, cybersecurity, legal, etc.) which this may involve.

Bank share prices in the main European countries have moved on a downward path in the year so far

The pressure on profitability and the other risks mentioned in Chapter 1 help to explain the stock market performance of European banks in 2018 so far. For nearly all the first half of the year, European bank share prices – except in Germany where they have fallen over the whole year and in Italy where they rose in the first few months of the year – held fairly steady. However, from mid-May European bank share prices, particularly in Italy, began to fall and have held on a downward trend since then (see Chart 2.25.A). As a result of this behaviour, bank share prices in the main European countries have fallen between 24% and 26% in the year so far and those of German banks have slumped by more than 40%. Spanish banks have followed this same trend and have fallen by 24% between 1 January and 30 October 2018. These share price falls reduce the price-to-book value of the European banking systems. As far as this metric is concerned, the Spanish banking sector is in line with the European average, although above the average of the euro area and of such countries as France and Italy, and, particularly, Germany (see Chart 2.25.B).

The recovery of profitability should be used largely to strengthen solvency levels

With very low interest rates and narrow margins, Spanish banks have continued to improve the bottom line of their income statements (basically due to the reduction of impairment losses). This recovery of profitability enables banks to assign more funds to strengthening solvency levels and bring them nearer to the levels of banks in the other euro area countries, a circumstance which is analysed below.

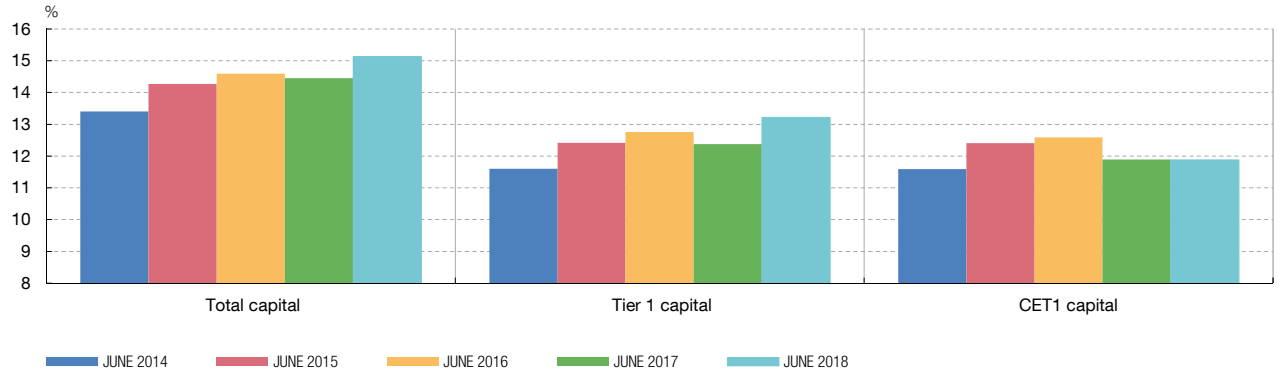
2.3 Solvency

In June 2018 the CET1 ratio stood at 11.9%, the same...

In June 2018 the CET1 ratio, which measures the highest quality capital, stood at 11.9%, the same level as the previous year (see Chart 2.26). Although the level of the ratio did not change from June 2017 to June 2018, its numerator (CET1) and denominator (RWAs) did change. Both decreased in the past year in the same proportion, namely 5.5% (see

CAPITAL RATIOS
Deposit institutions

CHART 2.26



SOURCE: Banco de España.

...level as the previous year, because CET1 and RWAs decreased in the same proportion

Chart 2.27.A). The decrease in CET1 is due largely to lower transitional adjustments,[5] which decreased by nearly 60% from June 2017 to June 2018 due to the approach of the period of full implementation of Basel III. The main transitional adjustments were deductions of intangible assets, which have been eliminated in 2018. The main transitional adjustments remaining which relate to Basel III are deductions of deferred tax assets that rely on future profitability (€3.2 billion). Also, 2018 saw the introduction of transitional adjustments derived from the mechanism of progressive adaptation of the impact of IFRS 9 on capital ratios (amounting to nearly €4 billion at June 2018), the phase-in schedule for which has a duration of five years.

Over a longer timeframe, from June 2014, the first year in which the prudential standards known as Basel III were applied upon the entry into force of CRD IV/CRR (particularly the introduction of CET1), common equity Tier 1 ratio has increased by 0.3 pp. By contrast, the other two capital ratios, i.e. total capital and Tier 1 capital, have increased to a much greater extent: 1.7 pp and 1.6 pp, respectively (see Chart 2.26). And in the past year both ratios have also increased: the total capital ratio by 0.7 pp to 15.1% and the Tier 1 capital ratio by 0.8 pp to 13.2%.

Additional Tier 1 capital increased as a proportion of own funds due to the significant decrease in transitional adjustments

The significant decrease in transitional adjustments as banks fully converge on the new definition of capital has prompted a reshuffling of the composition of own funds, in which common equity Tier 1 has decreased and additional Tier 1 capital has increased (and thus the difference between CET1 and Tier 1 capital has widened). Hence common equity Tier 1 capital represents 78.5% of own funds at June 2018 (compared with 82.2% a year earlier), and additional Tier 1 capital represents 8.8% of own funds (compared with 3.4% a year earlier). Meanwhile, Tier 2 capital has decreased somewhat and its relative weight is 12.7% of own funds (compared with 14.4% a year earlier).

Equity instruments and reserves make up most of common equity Tier 1 capital

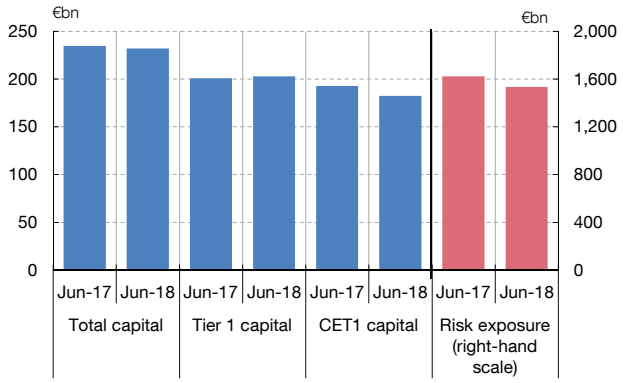
Chart 2.27.C allows us to examine in greater detail the composition of common equity Tier 1 in terms of risk-weighted assets. Equity instruments make up most of the eligible elements of CET1, accounting for 56% of them (nearly 9 pp of the CET1 ratio). Reserves constitute 35% of the eligible elements (5.7 pp of the ratio), such that capital and reserves

5 Transitional adjustments generally defer over time the deductions from own funds set out in Directive 2013/36/EU of 26 June 2013 (CRD IV) and in Regulation (EU) 575/2013 of 26 June 2013 (CRR), which implement Basel III in Europe such that the reduction of CET1 is spread over more years. Broadly speaking, the transitional adjustment was 80% in 2014, 60% in 2015, 40% in 2016, 20% in 2017, and disappears in 2018.

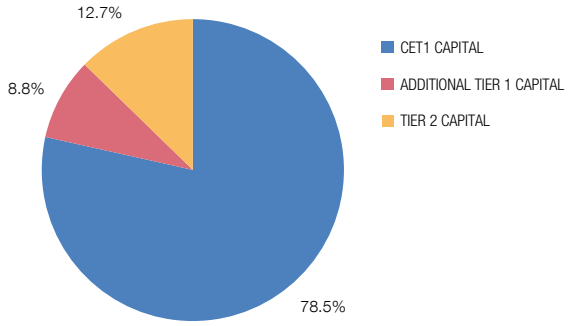
BREAKDOWN OF OWN FUNDS AND RISK-WEIGHTED ASSETS
Deposit institutions. June 2018

CHART 2.27

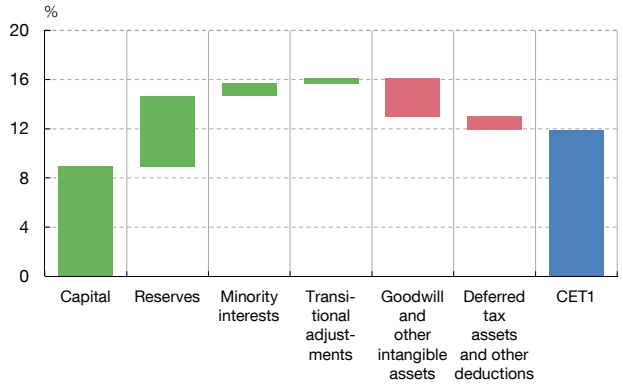
A LEVELS OF CAPITAL AND RISK EXPOSURE



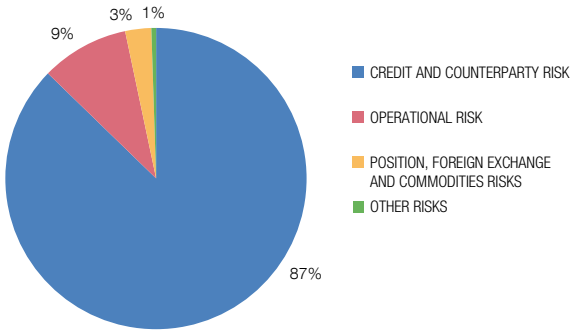
B BREAKDOWN OF OWN FUNDS



C BREAKDOWN OF CET1 RATIO AS % OF RWAs



D BREAKDOWN OF RISK-WEIGHTED ASSETS



SOURCE: Banco de España.

represent 91% of the eligible elements of CET1 (14.7 pp of the ratio). Minority interests have a relative weight of 6% (1 pp of the ratio) and, finally, the aforementioned reduction of transitional adjustments caused their weight in the eligible elements of CET1 to drop below 3% (compared with, for example, 20% at June 2014). As for deductions (4.2 pp of the ratio), those derived from goodwill and other intangible assets account for nearly three-quarters of them (3.1 pp of the ratio).

Finally, as regards the composition of the denominator of the ratios, i.e. risk weighted assets, its structure remains the same as in previous years. Thus, credit and counterparty risk account for most of RWAs, namely 87%, operational risk for 9%, and position, exchange and commodity risk (different manifestations of market risk) and other risks account for less than 5% of the RWAs of the Spanish banking sector (see Chart 2.27.D).

Both the CET1 ratio and the Tier 1 capital ratio of Spain are low compared with those of the other euro area members, while in terms of the leverage ratio, its position is less unfavourable

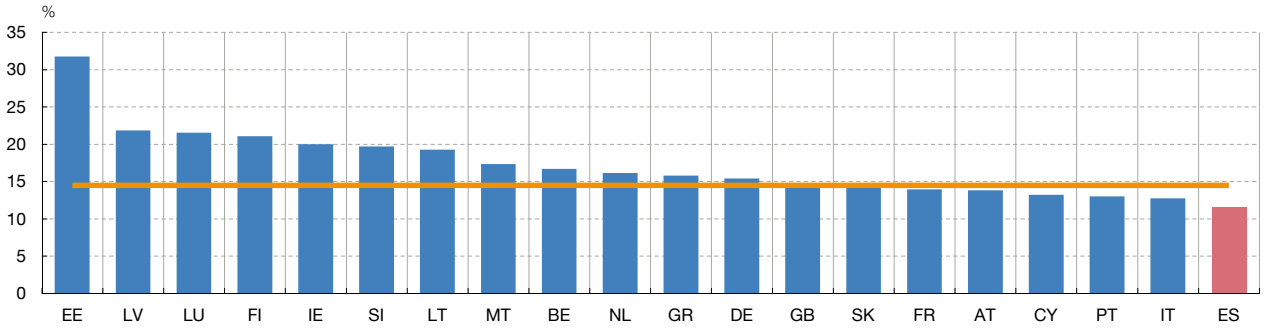
Chart 2.28.A is a European comparison of the common equity Tier 1 ratio using figures of the banks which reported COREP data to the European Banking Authority as at June 2018.[6] As seen in the chart, the European comparison of capital ratios shows that Spanish banks have low CET1 and Tier 1 capital ratios (see Chart 2.28.B) and low total capital ratios (see Chart 2.28.C). However, in terms of the leverage ratio (see Chart 2.28.D), the position is less unfavourable compared with other large European countries due to the

6 See http://www.eba.europa.eu/risk-analysis-and-data/risk-dashboard

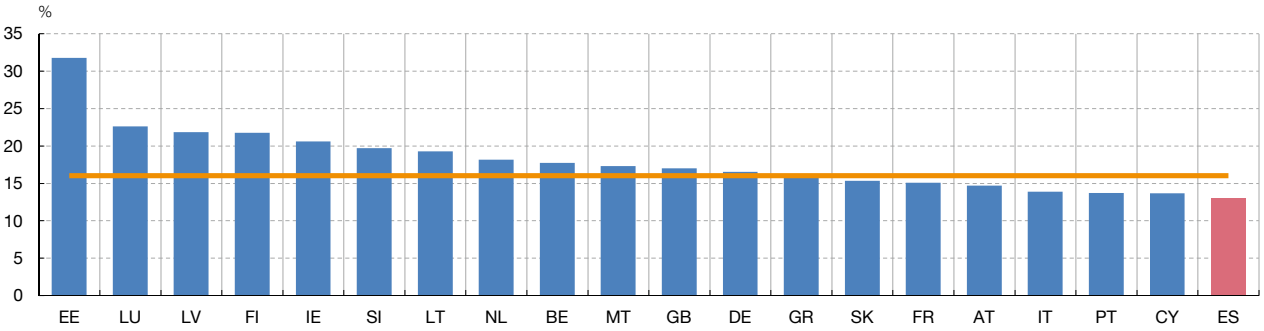
SOLVENCY. EUROPEAN COMPARISON.
SSM COUNTRIES AND UNITED KINGDOM. JUNE 2018

CHART 2.28

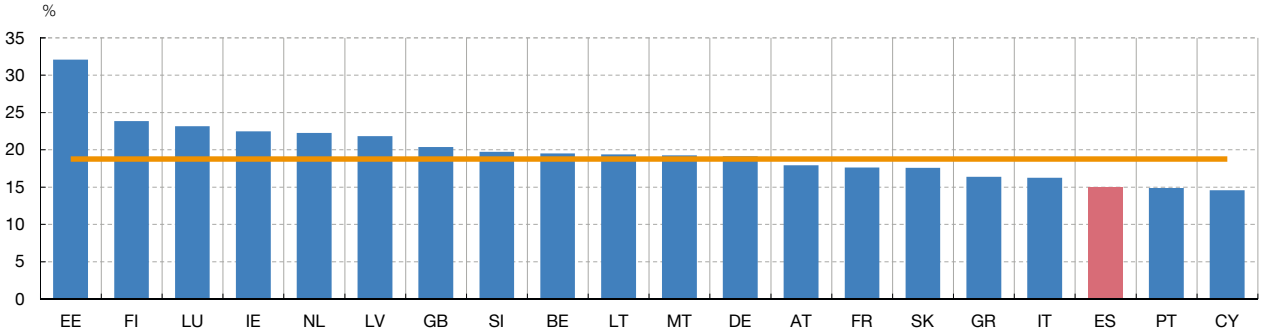
A CET 1 RATIO



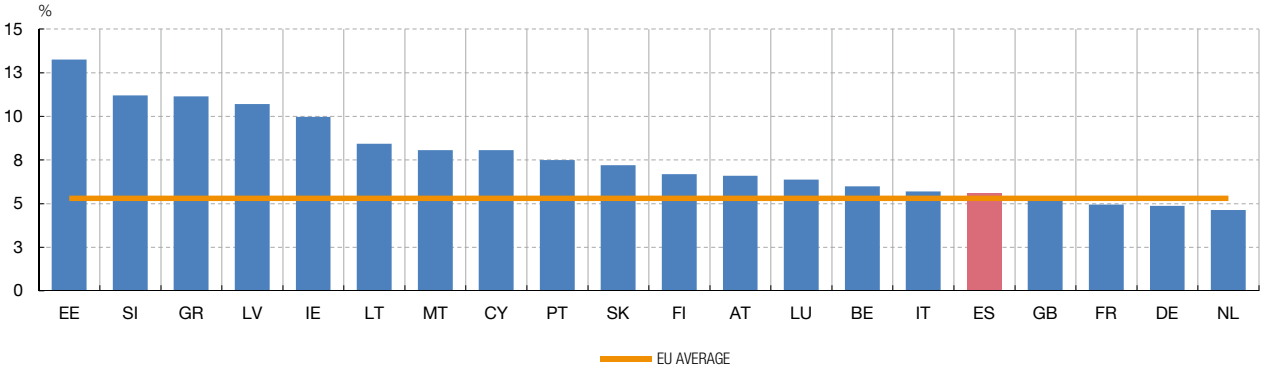
B TIER 1 RATIO



C TOTAL CAPITAL RATIO



D LEVERAGE RATIO

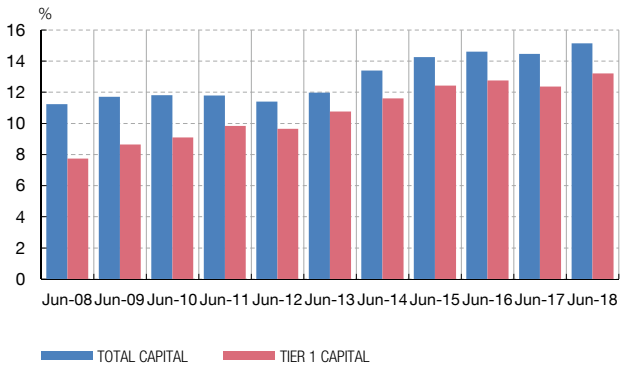


SOURCE: EBA.

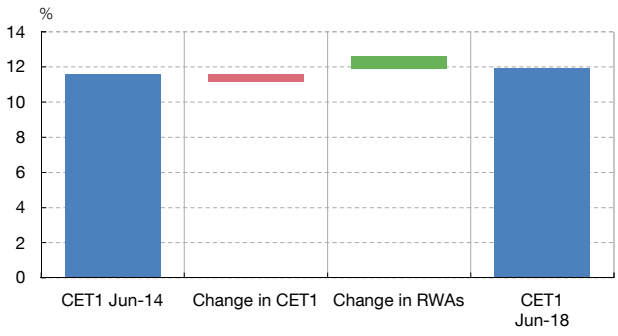
EVOLUTION OF CAPITAL RATIOS OVER TIME
Deposit institutions

CHART 2.29

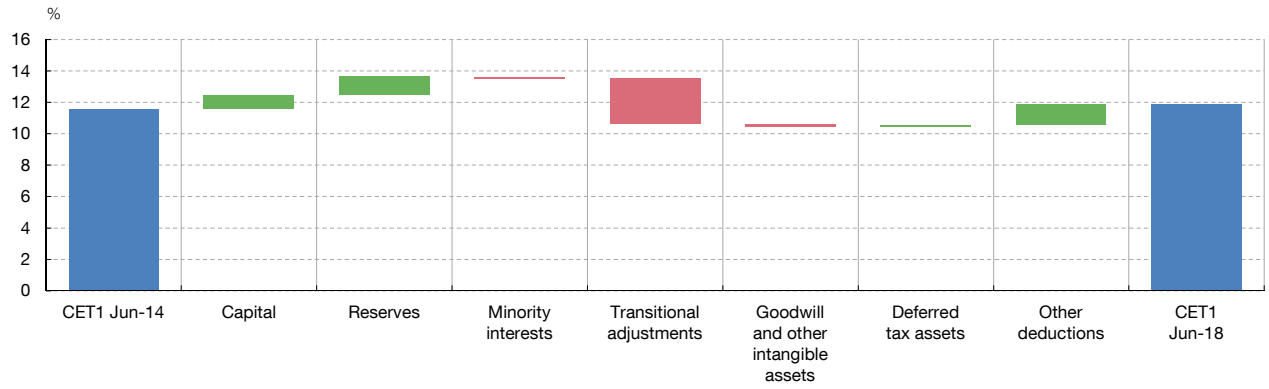
A EVOLUTION OF TIER 1 CAPITAL RATIO AND TOTAL CAPITAL RATIO OVER TIME



B BREAKDOWN OF THE CHANGE IN CET1 RATIO BETWEEN JUNE 2014 AND JUNE 2018. CHANGE IN NUMERATOR AND DENOMINATOR



C BREAKDOWN OF CHANGE IN CET1 RATIO BETWEEN JUNE 2014 AND JUNE 2018 AS % OF RWAs



SOURCE: Banco de España.

higher densities of RWAs in Spain, or, in other words, the higher ratio of RWAs to total exposures or of average risk exposure to unadjusted exposure in absolute terms.

Chart 2.29.A shows the historical development of the capital ratios of Spanish banks. Chart 2.29.A, which sets out the yearly changes in the total and Tier 1 capital ratios from June 2008, shows that the Tier 1 capital ratio has grown in the whole period except 2012 when the sector incurred significant losses. For its part, the total capital ratio has also grown from 2012, whereas before then it had remained relatively steady.

The CET1 ratio has shown practically no increase since 2014, and the rise of 30 bp is due to a decline in RWAs

The analysis of the common equity tier 1 capital ratio is limited to the period 2014-2018 because, as noted above, this highest-level capital was instituted by the Basel III prudential standards which began to be applied in March 2014. Chart 2.29.B shows how the CET1 ratio practically did not increase in value with respect to 2014. Moreover, this increase of 30 bp in the ratio did not take place as a result of the effect of an increase in eligible capital, but rather because of a decrease in risk-weighted assets (denominator of the ratio).

Chart 2.29.C gives a breakdown of the 30 bp change in the CET1 ratio from 11.6% at June 2014 to 11.9% at June 2018. In this period, capital and reserves eligible as CET1 increased by a little more than 2 pp of RWAs. There was little change in the contribution to the ratio made by minority interests and by deductions for goodwill and other intangible

assets and for deferred tax assets, while the contribution made by other deductions increased by 1.3 pp of RWAs. The increases in the ratio derived from capital, reserves and other deductions are largely offset by the decrease in transitional adjustments of nearly 3 pp of the ratio, which kick in as the effect of the entry into force of Basel III progressively impacts on CET1, finally resulting in the aforementioned 30 bp increase in the CET1 ratio in the last four years.

Banks should seek to strengthen their capital position because solvency is a vital factor in their loss-absorbing capacity and a key indicator for the market

Broadly it can be said that, compared with other European banks, the capital ratio position of Spanish deposit institutions partly reflects the intense balance sheet clean-up carried out by them and the greater density of their risk-weighted assets. Additionally, the market indicators (price to book value) of Spanish banks, when compared with those of the large euro area countries, are relatively higher (see Chart 2.25.B). However, banks should adopt strategies to strengthen their capital as it must not be forgotten that a bank's solvency is the basic pillar supporting its loss-absorbing capacity in the event of unforeseen losses materialising as a result of the risks (credit, market, operational, legal, etc.) affecting the Spanish and other European banking systems. Furthermore, it is a key indicator for the market to assess the soundness of and confidence in a bank or banking system in general. Also, a comfortable solvency level allows a bank to respond without delay to a possible upturn in the demand for credit, which in turn contributes to strengthening economic growth and the financial position of banks.

Additionally, it should be kept in mind that the minimum requirement for own funds and eligible liabilities (MREL) which the Single Resolution Board (SRB) has begun to set for European significant institutions is an additional reason for Spanish banks to strengthen their capital in the current environment, in which profitability, although influenced by interest rate and deleveraging issues, continues to recover and in which the economy is growing at a significant pace. For more details on the MREL, see Box 2.4.

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

The Banco de España has been conducting yearly since 2013 tests of the Spanish banking system's resilience using an analysis framework known as FLESB (Forward Looking Exercise on Spanish Banks). The FLESB framework is a proprietary tool of the Banco de España, which centres its analysis on Spanish banks' resilience, measured in terms of solvency and liquidity, under different macroeconomic scenarios. The tool features a top-down approach, homogeneous methodological assumptions defined by the national regulator and the use of highly granular data.

A liquidity analysis and the IFRS 9 framework were also incorporated into the FLESB in the course of its development

The Banco de España has introduced continual improvements in the methodology used, the main calculation methods and the scope of the risks addressed, including notably in 2017 the introduction for the first time of an analysis of each bank's liquidity position. This year the entry into force on 1 January 2018 of the new accounting rules International Financial Reporting Standard 9 (IFRS 9) and Banco de España Circular 4/2017 have marked a change in the basic methodologies used to calculate credit risk losses and prompted a review of the treatment of this risk within the FLESB framework. In particular, the credit category Stage2, S2, that which includes those performing financial instruments that have had a significant increase in credit risk, was added to the existing ones of "performing" (Stage 1, S1) and "non-performing" (Stage 3, S3). Also, the expected losses relating to this category, S2, are calculated for the whole life of the exposure (using a lifetime probability of default) rather than just for the twelve months used for performing exposures. Also incorporated is a model of the transition of exposures among these three stages for the whole time horizon of the exercise.

European banking union has so far led to the launch of the SSM (Single Supervisory Mechanism) and of the SRB (Single Resolution Board), the latter entrusted with preparing the resolution of European significant institutions. This preparation includes the formulation of resolution plans, analysis of resolvability and the imposition of minimum requirements for own funds and eligible liabilities (MRELs) so as to comply with the paradigm change instituted at international level as a result of the past banking crisis. This paradigm change in the resolution of financial institutions consists of the replacement of bail-outs (bank rescue or recapitalisation using public funds) with bail-ins (bank rescue using private funds from the bank itself).

Despite the efforts made by the SRB since its creation to advance in the construction of the resolution arm of banking union, some uncertainties remain which relate in part to the current debate over the new European resolution directive (known as BRRD2). These rules may affect the MREL in matters such as calibration, subordination, transitional periods for effective compliance, etc. So far the SRB is not taking into account these changes in the development of its internal policies since they do not yet have the status of approved rules.

At the beginning of 2018, the SRB set for the first time binding consolidated-level MREL targets by resolution group for those Spanish banks with resolution colleges (because they have banking activity both in the banking union and outside it but in the European Union). The requirements were based on the methodology approved by the SRB to calculate MRELs for the bail-in resolution tool.[1]

This year the SRB plans to set binding targets at consolidated level for the rest of the Spanish banks within its area of competence. For this purpose, in the current year the SRB has developed an internal MREL calibration methodology for tools other than bail-in. This methodology is of a transitional nature and has yet to be communicated to banks. This is of particular importance for Spanish significant institutions because the preferred tool of some of them is sale of business.

For larger banks, the current MREL calculation methodology for the bail-in tool does not entail foreseeable major difficulties in meeting the MREL target at consolidated level, as was publicly announced by the banks themselves following the communication of the binding target early this year.

The situation for medium-sized banks is not so clear. The calculation methodology for banks with a resolution strategy other than bail-in, which is transitional and only intended to be used while a final methodology adapted to each bank is being designed, may lead to MRELs not much lower than those which would result from use of the calibration stipulated in the bail-in tool.[2]

These banks, in the Spanish case, have an essentially retail business model, particularly on the liabilities side, where the taking of deposits from natural persons and SMEs has a high relative importance in their funding structure. This focus, which generally affords greater stability to a bank's liabilities, does however lower the MREL target because these deposits do not have the status of eligible instruments for determining compliance. Moreover, business model, with liabilities basically consisting of retail deposits and capital means that their experience as issuers centres basically on the equity markets. They therefore have a limited investor base and potential difficulties in accessing the (preferred and non-preferred) debt markets. The size of these banks, which is relatively small on a worldwide or European scale, is an additional problem when it comes to attracting a wide investor base.

Finally, the issuance of instruments of this type will foreseeably have a much greater impact on the interest spread of medium-sized Spanish banks than on that of large banks. This is due to the aforementioned difficulties of market access and to the low volume, in absolute terms, of the issues placed by medium-sized banks. The smaller the total amount of a bank's outstanding debt, the smaller its liquidity, and, consequently, the larger the premium required by investors.

In view of all the above, given the regulatory uncertainty that exists, it will be necessary to press ahead in the definition of calculation methodologies which take into account the special features of each bank as regards risk profile, funding model, size and market access in order to align MRELs with banks' business models.

Spanish banks have already begun to strengthen their MREL levels, making limited use of senior non-preferred debt and with a clear predominance of issues by larger banks. Furthermore, placement prices vary greatly, with cost differences between medium-sized and large banks which exceed, for example, 5 pp in AT1 instruments.

In the case of less significant institutions (LSIs), the difficulties are similar or even greater than for medium-sized significant institutions, although in this case the Banco de España will be responsible for calibrating the MREL level to be met by these banks once the methodology has been clearly defined at European level.

In summary, the paradigm change in the resolution of deposit institutions from bail-out to bail-in will give rise to not insignificant

1 In addition to bail-in, the rules envisage another three resolution tools: sale of business, bridge banks and asset management vehicles. In principle, none of the four tools is given priority over the others.

2 It should be noted that in *open bank bail-in* the post-resolution bank must be recapitalised using funds of the bank itself, while in the case of a sale of business, the funds for the recapitalisation must be provided in full or in part by the purchaser, as has occurred recently.

MRELs in the coming years. The progressive improvement in Spanish bank profitability against a background of sustained economic expansion and relatively low funding costs should allow Spanish deposit institutions to gradually build up the MREL elements needed to operate in the new regulatory environment. Since the MREL includes not only liabilities but also own funds (capital and reserves), any improvement in the volume of the latter held by a bank will also contribute to meeting the MREL target.

Scenarios used: solvency and liquidity

The baseline scenario reflects the central expectations for 2018-2020 while the adverse scenario assumes a sharp repricing of financial assets and a fall in overall economic growth

In this exercise, the FLESB solvency analysis was conducted using the macroeconomic scenarios designed for the stress test coordinated by the EBA at European level.[7] The baseline scenario includes the most likely changes in the economic environment over the three years of the exercise from 2018 to 2020, while the adverse scenario assumes the materialisation of the main risks to the European economy identified by the ESRB. In particular, the scenario assumes a sharp repricing of risk premia on the global markets with an impact on multiple assets: an increase in the level and slope of the US interest rate curve and a global shock to the equity markets. This repricing and the consequent worsening of financial conditions prompt a global recession, Europe included. Other risks materialised in this adverse scenario include feedback between low bank profitability and weak economic activity, activated by the recession of the scenario, and excessive public and private debt and a lack of liquidity of non-bank financial institutions.[8] It should be emphasised that the adverse scenario does not reflect national or European authorities' expectations regarding macroeconomic behaviour, but rather hypothetical conditions used to assess the resilience of banks to extreme and unlikely conditions.

The adverse scenario assumes a recessionary tendency in Spain in 2018 and 2019, recovery in 2020 and a cumulative fall in GDP of –0.7%

Chart 2.30.A compares GDP growth in Spain over the time horizon of the exercise under the baseline and adverse scenarios. In the first two years, 2018 and 2019, the adverse scenario shows negative GDP growth of –0.3% and –1.5%, respectively, and only in the last year does it show moderate positive growth of 1.1%. The adverse scenario thus shows a cumulative decrease of –0.7% compared with the baseline scenario which gives cumulative growth of 6.7% in the three years.

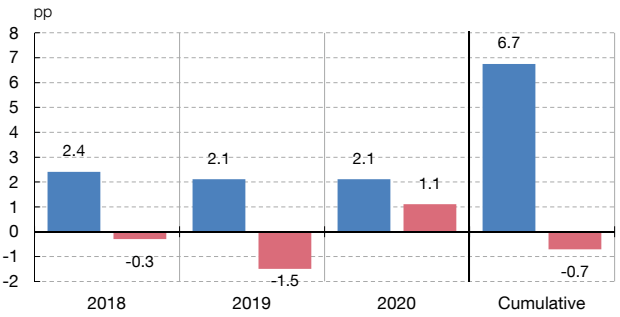
Under the adverse scenario, house prices fall by 14.4% in aggregate terms

The scenario of the EBA exercise includes a broad set of variables in addition to GDP growth (unemployment rate, interest rates, etc.) which are also used in the FLESB exercise and determine the severity of the scenario, which is not summarised in a single variable. Charts 2.30.B to 2.30.D show the behaviour of other key variables under the two scenarios considered. Most notable is the severity of the house price slump under the most adverse assumptions. The baseline scenario gives cumulative house price growth of 15.5%, while the adverse scenario shows slight growth in the first year and sharp falls in the next two years, with a cumulative decline of –14.4%.

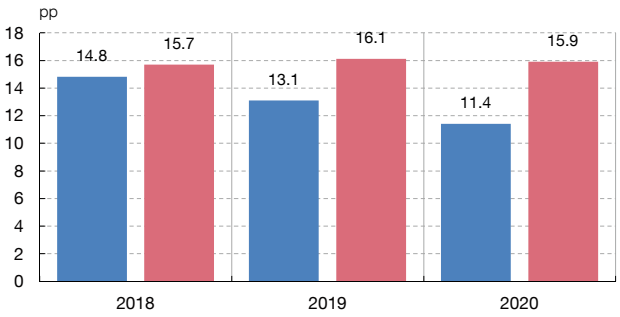
7 Although the scenarios used by the FLESB are the same as those used by the EBA in the exercise conducted at European level, the assumptions, methodology, estimation of parameters and scope of application (institutions stressed and risks analysed) differ, so the results of the two exercises are not directly comparable and hence there are differences between them.

8 It is interesting to note that although the adverse scenario was defined at the beginning of this year, to some extent it factors in the risks identified in the summary of this FSR. Specifically, repricing risk (rising interest rates) and the potential negative impact of the emerging economies.

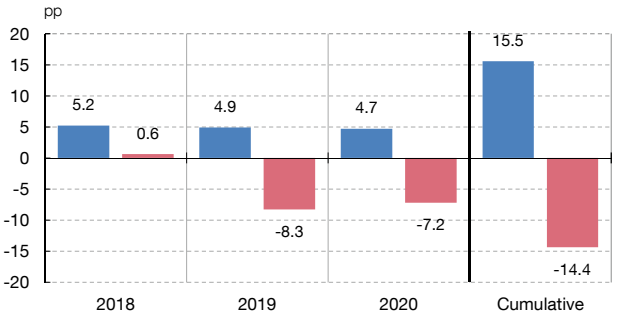
A FORECASTED YEAR-ON-YEAR RATE OF CHANGE OF GDP UNDER BASELINEAND ADVERSE SCENARIOS



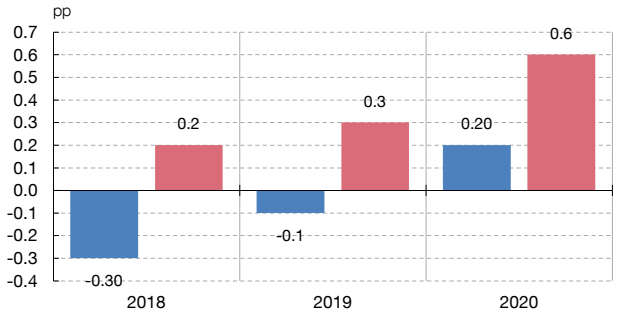
B FORECASTED UNEMPLOYMENT RATE UNDER BASELINE AND ADVERSE SCENARIOS



C FORECASTED YEAR-ON-YEAR RATE OF CHANGE OF HOUSE PRICES UNDER BASELINE AND ADVERSE SCENARIOS



D FORECASTED 3-MONTH INTERBANK RATE UNDER BASELINE AND ADVERSE SCENARIOS



SOURCE: Banco de España.

The impact of these scenarios on the balance sheet and business of banks is projected through the use of various ancillary models (e.g. by calculation of expected losses due to credit risk over the 2018-2020 time horizon). Solvency at the end-date of the exercise is determined by the bank's capacity to absorb losses through elements such as previously recorded provisions, the pre-provision profit generated within the analysis time horizon and the capital held in excess of minimum regulatory capital.

The adverse scenario for the liquidity exercise assumes significant outflows of funds for both the retail and wholesale sectors

The analysis of each bank's liquidity position within the FLESB framework is based on the Liquidity Coverage Ratio (LCR). To carry out this analysis, the baseline scenario uses the regulatory coefficients for 30-day fund outflows set by the Basel Committee and the EBA. The adverse scenario is calibrated by the Banco de España on the basis of its past experience of fund outflows observed in previous liquidity crises. Chart 2.31 shows the main coefficients applied as a result of the defined scenarios.

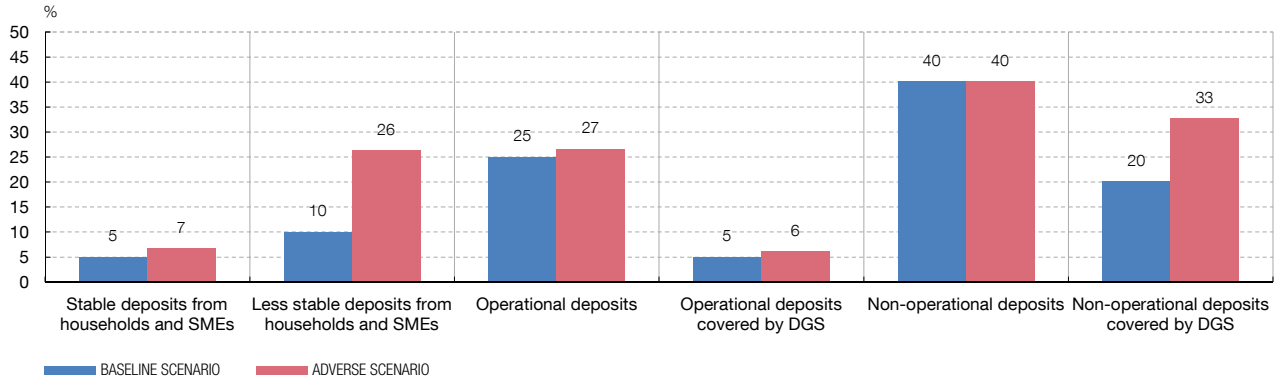
Results yielded by the FLESB methodology: Solvency

Analysis by banking group defined on the basis of bank size and international activity

The 57 banks that take part in the exercise are divided into three groups based on size and international presence. The heterogeneity of the Spanish banking system makes this classification necessary in order to reflect the differences in the sources of risk to which the various banks are exposed. This classification coincides with that used last year in the forward-looking exercise to assess the resilience of the Spanish banking system.[9]

9 See Financial Stability Report, Banco de España, November 2017, page 66. https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/17/IEF_Noviembre2017Ing.pdf

LIQUIDITY STRESS TEST SCENARIO. PERCENTAGE OF OUTFLOWS OF FUNDS BY TYPE OF DEPOSIT AND BY SCENARIO (a) CHART 2.31



SOURCE: Banco de España.

a Certain activities require customers to make or mantain deposits in a bank to improve their ability to access and use the payment and settlement systems or make payments by other means; these deposits are considered operational. Both operational and non-operational deposits are held by the corporate sector.

The first group consists of the Spanish banks forming part of the Single Supervisory Mechanism (SSM) with significant international activity,[10] the second group consists of the other significant Spanish banks in the SSM and the third group comprises other (less significant) banks of lower complexity and smaller size, which are supervised directly by the Banco de España. Reported here for each group is the CET1 Fully Loaded (FL)[11] capital ratio in the starting year, December 2017, and the impact of the baseline scenario and the adverse scenario in the three years of the exercise, showing the ratio at the end of the time horizon, December 2020. Details are given of the effect of the gross credit losses and of the use of existing provisions, in both cases referring to business in Spain and expressed as a percentage of risk-weighted assets (RWAs) in 2017. Also, the cumulative effect of the estimated results[12] (on RWAs in 2017) is separated from the other impacts on CET1 (tax effects, changes in RWAs, distribution of profit, etc.).

The banks with significant international activity have a maximum impact of -1 pp of the FL CET1 ratio under the adverse scenario

First, the group of institutions with significant international activity is considered. For all these banks, their business in Spain is analysed by, among other things, calculating the expected losses on individual exposures, on the basis of the highly granular data available. Additionally, for this first group of banks, business abroad, for which the available data are less granular, is also considered. The analysis thus focuses on the income statement projections and, in particular, on the net profit attributable at each of the main foreign subsidiaries. These projections are conditional on the international macroeconomic scenarios of the EBA's European exercise.

Chart 2.32 shows the results for this group of banks with significant international activity. For the baseline scenario, there is a significant improvement in the solvency of banks of this type, whose CET1 ratio increases by 3 pp from 11.1% to 14.1% at the end of the time

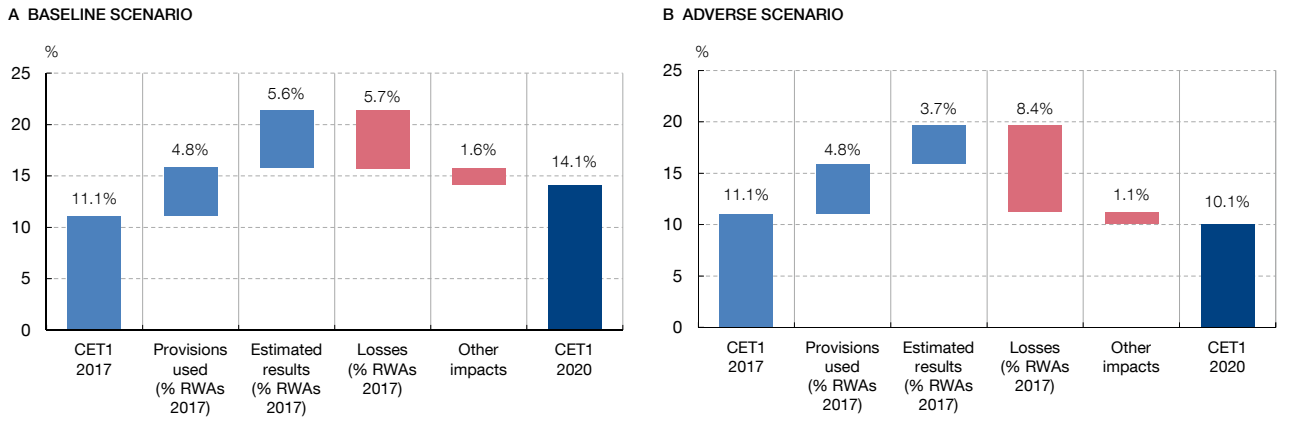
10 The composition of this group of three banks remains unchanged from the previous FLESB exercise. A bank in this group enlarged its perimeter significantly in 2017 through a corporate transaction. Two banks in the group of other Spanish banks in the SSM increased their international activity in 2017, but their volume of business is not comparable to that of the three banks in the first group and they therefore remain classified outside this group.

11 The fully loaded CET1 is calculated as the sum of all eligible capital elements at a given date less the full regulatory deductions, disregarding the reduction of deductions according to the progressive implementation (phase-in) schedule.

12 Estimated results include both the net income before provisions of business in Spain and the contribution by group subsidiaries to the net profit attributable to the parent company.

IMPACT ON CET1 FL RATIO.
INSTITUTIONS WITH SIGNIFICANT INTERNATIONAL ACTIVITY

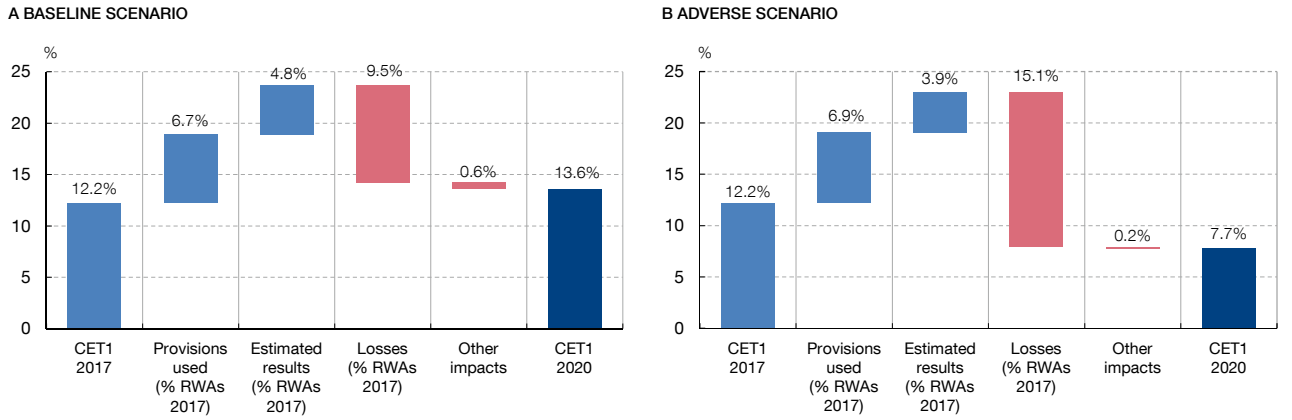
CHART 2.32



SOURCE: Banco de España.

IMPACT ON CET1 FL RATIO.
OTHER SSM INSTITUTIONS

CHART 2.33



SOURCE: Banco de España.

horizon of the exercise. The volume of gross losses in Spain (5.7% of RWAs) is practically offset by a notable generation of profits (5.6% of RWAs).

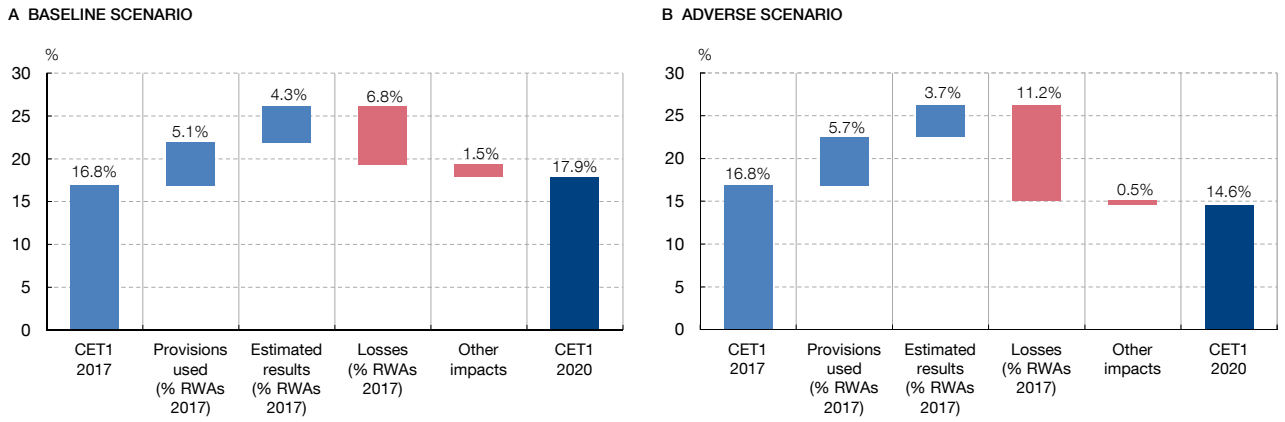
For the adverse scenario, the CET1 ratio of these banks decreases by 1 pp to 10.1% in 2020. The worse macroeconomic conditions under this scenario prompt higher losses (8.4%), which cannot be absorbed by provisions and attributable profit. The generation of profits decreases by approximately 35% compared with the baseline scenario.

The FL CET1 ratio of the other banks supervised by the SSM increases by 1.4 pp in the baseline scenario, while it decreases by 4.5 pp in the adverse scenario

The results of the other banks directly supervised by the SSM (nine banks) are shown in Chart 2.33. For the baseline scenario, CET1 improved more moderately, by 1.4 pp, than at banks with significant international activity. Although they start from more favourable solvency position, with a CET1 ratio of 12.2%, their ratio in 2020 is somewhat lower than that of the banks in the first group. This is because the volume of losses is higher (9.5% of RWAs, 3.8 pp more than in the first group) and the generation of profits is moderate (4.8% of RWAs, 0.8 pp below that of the first group), and these factors cannot be offset by a use of provisions which is 2.1 pp higher than in the group of banks with significant international activity.

IMPACT ON CET1 FL RATIO.
LESS SIGNIFICANT INSTITUTIONS

CHART 2.34



SOURCE: Banco de España.

Under the adverse scenario there is a very considerable increase in the volume of losses in this group (15.1% of RWAs). Moreover, the available loss-absorbing elements are not sufficient to cover them: use of provisions (6.9% of RWAs) and earnings (3.9% of RWAs) against a background of low interest rates and significant pressure on margins. The high volume of losses is largely attributable to the notable fall in real estate prices for banks which have all their risk exposure in Spain and have a high volume of collateral, either as foreclosed assets or as loan collateral. The CET1 ratio stands at 7.7% at the end of the time horizon of the exercise, which is a significant fall of 4.5 pp.

The less significant group of banks shows an impact of –2.2 pp on the fully-loaded CET1 ratio under the adverse scenario

Finally, Chart 2.34 shows the impact of the scenarios on the solvency of banks in the last group, i.e. less significant institutions subject to direct national supervision. These banks start from a CET1 ratio of 16.8% in December 2017, the highest of the three groups analysed, and under the baseline scenario it increases, similarly to that of the SSM banks without significant international activity, by 1.1 pp. The volume of losses (6.8% of RWAs) is offset by the use of provisions (5.1% of RWAs) and by the generation of profit (4.3% of RWAs).

Under the adverse scenario, the volume of losses of less significant institutions increases by 4.4 pp with respect to the baseline scenario, reaching 11.2% of RWAs. These losses exceed the total volume of items available to absorb them (provisions and profits), giving rise to a moderate fall in the CET1 ratio (2.2 pp), which at the end of the time horizon of the exercise in December 2020 stands at 14.6%.

Based on the ending CET1 ratios, the foregoing results show that in aggregate terms Spanish deposit institutions have a high resilience to an adverse scenario. However, the unevenness of results across banks and the possibility that the risks which materialise may exceed those envisaged under the adverse scenario, make it advisable for banks to strengthen their capital insofar as the observed recovery of profits allows.

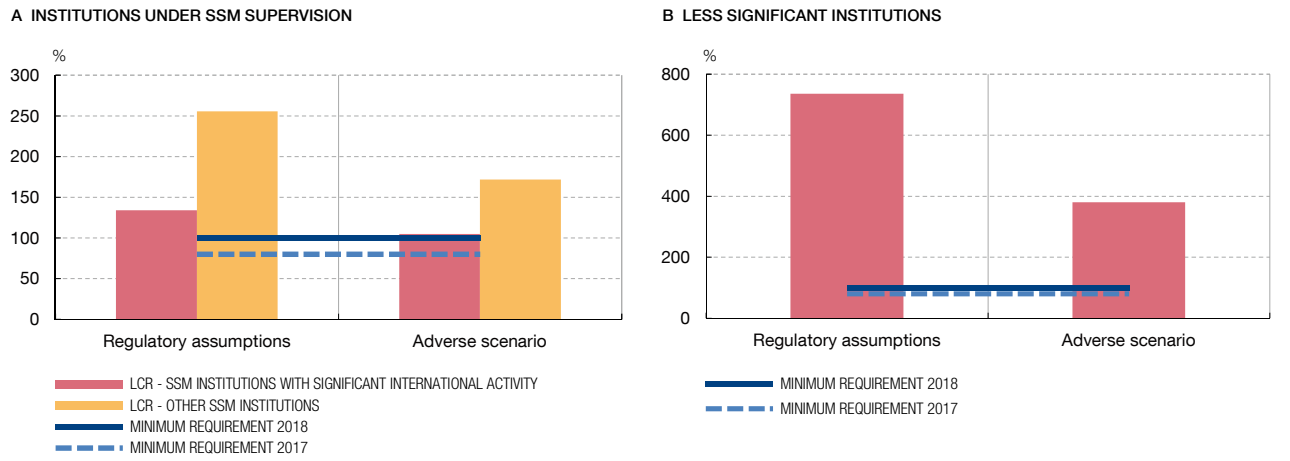
Results yielded by the FLESB methodology: Liquidity

The severe stress scenario significantly reduces the LCR ratio, which however remains...

The LCR ratio measures whether unencumbered high-quality liquid assets (HQLA) are sufficient to cover funding needs in 30 natural days in the event of liquidity problems. The reference date in this exercise is December 2017 and the analysis time horizon, in keeping with the definition of the LCR ratio, is the 30 days following that date. The starting

IMPACT ON LCR RATIO

CHART 2.35



SOURCE: Banco de España.

...above the minimum requirements

coefficients for the aforementioned baseline and adverse scenarios are applied to this analysis time horizon (see Chart 2.31).

Chart 2.35 shows the results obtained from this analysis and indicates that the liquidity position of Spanish banks is robust, since all the banking groups exceed the minimum LCR requirements set for 2018 (100%) under both scenarios. Particularly notable is the liquidity position of the less significant institutions, which even under the adverse scenario have a ratio of approximately 380%.

2.5 Results of the European-level stress test published by the European Banking Authority

The results of the biennial resilience test using EBA methodology were published on 2 November. Specifically, the stress test covers 48 banks from the European Union (EU) and the European Economic Area (EEA), accounting for around 70% of total EU banking assets.

Under the baseline scenario, for all the participating institutions, the CET1 capital ratio would increase, rising from 14.2% (fully loaded as at end-2017) to 15.3% in 2020 (an increase of 1.1 pp). As to the Spanish institutions participating in this test,[13] under this scenario they would post an increase on a greater scale (2.3 pp) in their capital ratio, rising from a ratio of 11.1% (fully loaded as at December 2017) to a ratio of 13.4% in 2020, at the end of the exercise (see Chart 2.36.A).

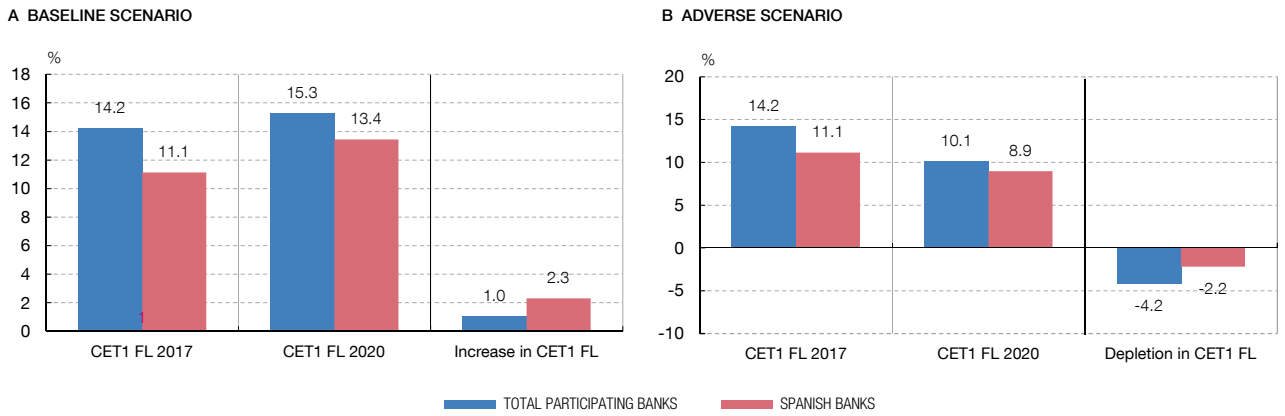
Under the adverse scenario, the European institutions would, overall, see a reduction of 4.2 pp in their capital ratio at the end of the year, placing it at 10.1% of risk-weighted assets. In the case of the Spanish banks the reduction is less, at 2.2 pp, down to a value of 8.9% (see Chart 26.B). Thus, Spanish banks, despite starting from a lower capital ratio than their European counterparts (11.1% against 14.2%), show greater resilience to the adverse scenario, which reflects the risks, at the current juncture, that are considered most relevant in respect of global financial stability.

On conducting the analysis at country level, it can be seen (Chart 2.37) that the Spanish banks (along with those of Norway and Poland) are part of the group for which the

13 Banco Santander SA, Banco Bilbao Vizcaya Argentaria SA, CaixaBank SA and Banco Sabadell SA.

EBA STRESS TEST RESULTS.
Total participating banks vs Spanish banks

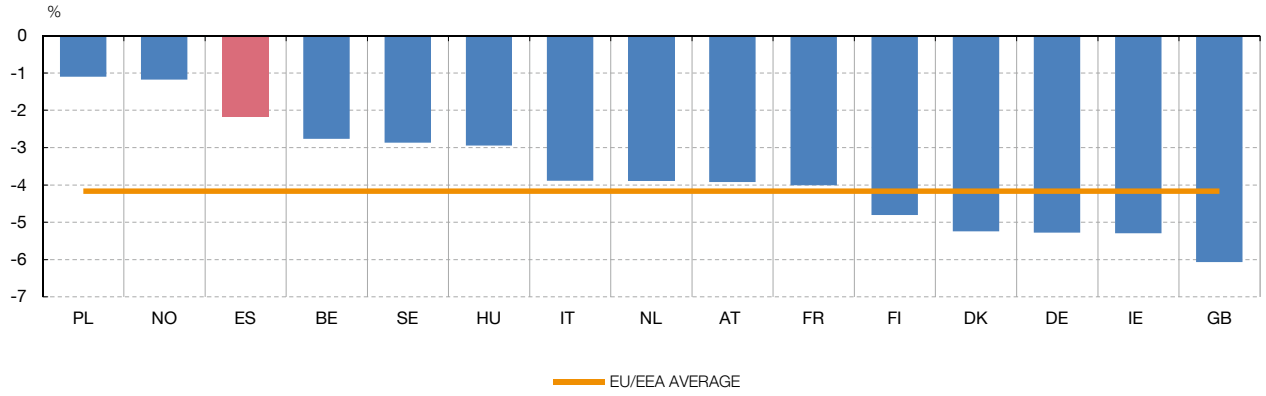
CHART 2.36



SOURCE: EBA.

RESULTS OF THE EBA STRESS TEST EXERCISE. COMPARISON BY COUNTRY.
Depletion in CET1 FL at the end of the time horizon of the exercise (adverse scenario)

CHART 2.37



SOURCE: EBA.

impact on the capital ratio is lower. At the opposite extreme are the UK banks, which show an impact of more than 6 pp in terms of the reduction in their CET1 capital ratio at the end of the year.

The methodology used by the EBA, the scope of the exercise and the risks analysed differ from those used by the FLESB. Accordingly, the results obtained are different. In any event, both exercises highlight the considerable resilience of Spanish banks to an adverse economic environment.

3.1 Analysis of systemic vulnerabilities

The map of indicators of systemic vulnerabilities has held stable since the last FSR

The map of indicators of systemic vulnerabilities, which is regularly published in this chapter, summarises information from over one hundred indicators of potential risk to the financial system and actual conditions in the real economy and in the banking sector in Spain.[1] These indicators have been selected as predictors of bank crises to anticipate identifying medium/long-term vulnerabilities, which is particularly useful for shaping the macroprudential policy stance steering the activation of macroprudential instruments, especially those that most closely affect the credit cycle.[2]

The update of this map as at June 2018 shows that the indicators of credit, liquidity, concentration, financial markets and macroeconomic imbalances have held stable since the last FSR (Chart 3.1).[3] Specifically, the indicators relating to credit, liquidity and macroeconomic imbalances are in a normal or alert-free situation.

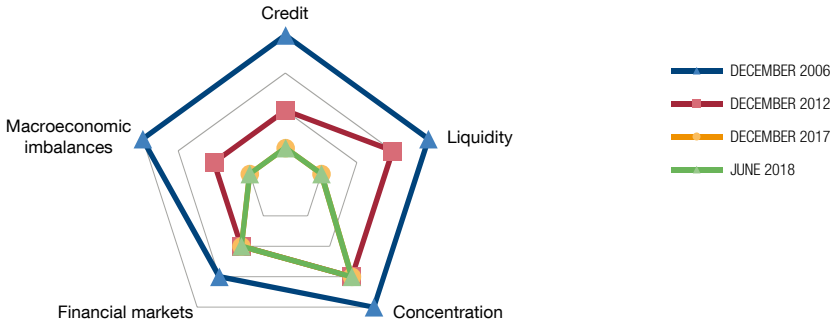
Holding in a normal or alert-free situation are the indicators of liquidity, credit and macroeconomic imbalances

In the case of credit, this is due mainly to fact that negative though moderate growth rates continue to be observed in the cases of lending both to households and non-financial corporations. The indicators of liquidity also remain in a favourable position, both those relative to bank balance sheets and those relating to market liquidity.

The category of macroeconomic imbalances still remains at alert-free levels, despite the slight deterioration in the current account balance as at June 2018 (see Chart 3.4.B). Other factors that have contributed to keeping this category stable are the slight improvements in the budget deficit and net external debt indicators, even though both remain at high absolute levels.

HEAT MAP LEVELS (a)

CHART 3.1



SOURCE: Banco de España.

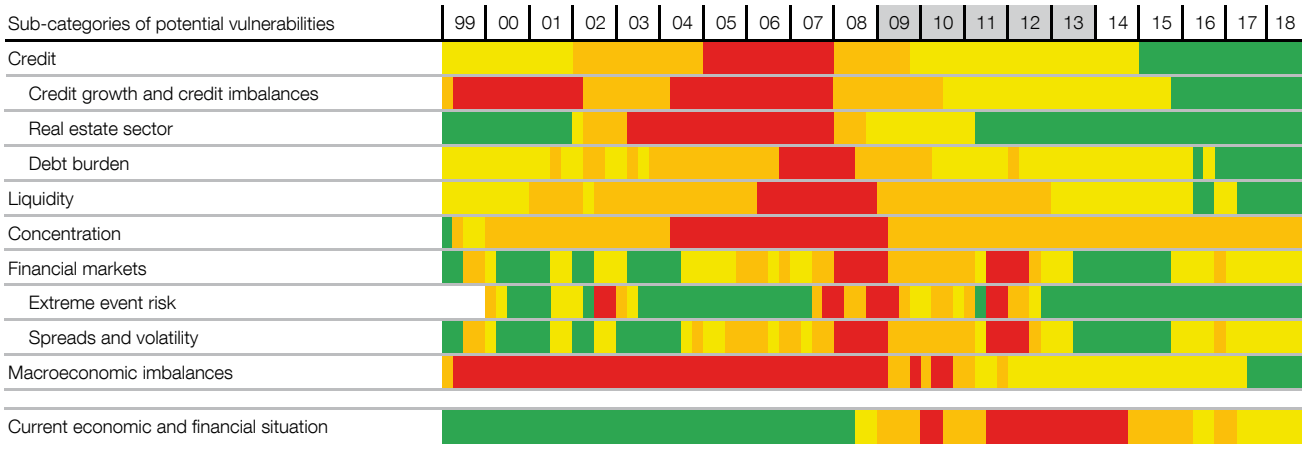
a The concentric line closest to the centre of the chart refers to a normal situation, while the risk level grows with increasing distance from the centre.

1 The definitions of the main categories correspond to those established by the European Systemic Risk Board in its Recommendation ESRB/2013/1 on intermediate objectives and instruments of macroprudential policy.

2 See Mencía, J. and Saurina, J. (2016) "Macroprudential policy: objectives, instruments and indicators". Occasional Paper 1601, Banco de España.

3 The map of indicators includes a set of indicators classified in five categories. The credit category groups together indicators on the changes in and degree of disequilibrium in total and bank credit to households, non-financial corporations and the entire non-financial private sector; the levels and debt burden of these sectors; interest rates on new lending business and on outstanding balances; and changes and imbalances in house prices. The liquidity category includes indicators on bank and market liquidity. The concentration category includes indicators on total bank credit concentration in different sectors and by type of borrower. The financial markets category groups indicators on correlations and interconnectedness between banking institutions and on systemic stress in different markets. The macroeconomic imbalances category includes indicators on external debt, the public sector and the current account balance.

HEAT MAP BY SUB-CATEGORY (a) CHART 3.2



SOURCE: Banco de España.

a The colour scheme identifies four levels of risk: i) green denotes a normal, risk-free situation, ii) yellow indicates low risk, iii) orange is medium risk, and iv) red is high risk. The shaded band denotes the period of the last crisis.

The indicator of financial markets remains at a low level of alert, even though there have been some rises in instability,…

The financial markets indicators remain at a low level of alert. This category showed no warning signs until early 2016 (Chart 3.2).[4] Since then, it has remained at a level of low alert, as a result of a series of short, recurring episodes of spikes in volatility. Notable among these episodes was that in mid-2016 owing to the Brexit referendum result. More recently, the latest episodes of this type indicated in Chapter 1 have been the rises in instability recorded within the euro area (Italy) and in the emerging economies (Turkey and Argentina). Owing to the limited impact to date of these latest two events on the Spanish financial market, there have been no changes in the level of warning signs of this indicator.

…whereas the concentration indicator held stable at an intermediate level

The concentration indicators are also holding stable at an intermediate level. In this case, the exposure to the sectors related to the last crisis continues to diminish, although the weight of credit for larger operations remains stable.

The economic and financial situation remains stable

Finally, the last row of Chart 3.2 shows the changes in the indicators on the situation of the economy and the financial system. Unlike the other indicators considered in the map of vulnerabilities, these do not seek to capture imbalances that might derive in future problems (indicators that anticipate banking crises), but rather the situation of the business cycle at each point in time. Currently, these indicators reflect an economic and financial situation that has improved significantly since 2014, and one that has been stable in the past year.

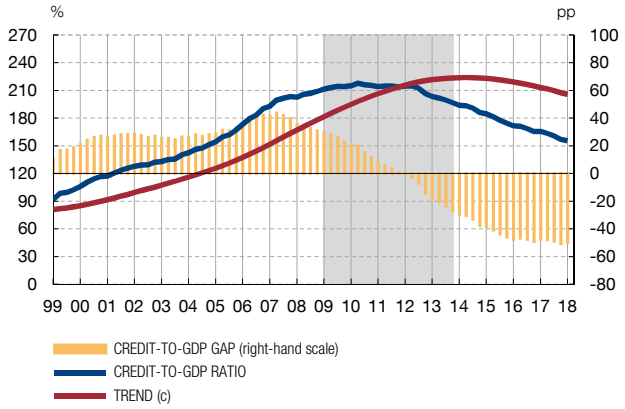
The analysis of vulnerabilities does not advise taking macroprudential measures

In sum, the map of indicators shows that the Spanish economy is currently in a low phase of the financial cycle that has been accompanied by a gradual economic recovery in recent quarters. It will be necessary to closely monitor developments over the coming quarters to assess to what extent the rise in shorter-dated risks identified in Chapter 1 begins to affect the cyclical vulnerabilities picked up by this tool. So far, the analysis of vulnerabilities presented through the colour scheme does not advise activating cyclical macroprudential instruments. This conclusion coincides with the analysis published quarterly by the Banco de España

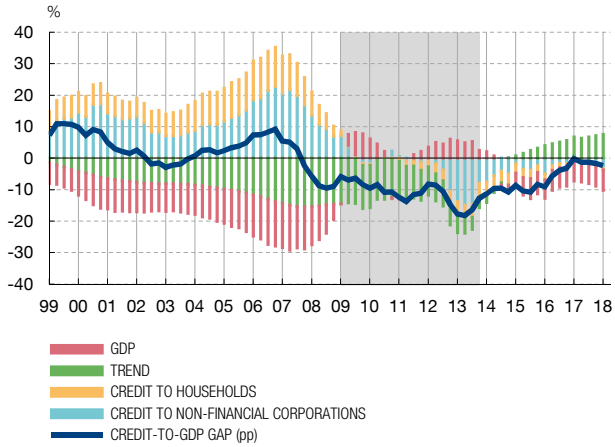
4 This chart shows the developments over time in the vulnerabilities in Chart 3.1 through a colour scheme that enables both the historical course of the indicators and the intensity of the warning signs to be observed. Intensity increases as the tone draws closer to red, while the colour green depicts a normal situation. The upper part of the chart presents the same categories considered in Chart 3.1, with an additional breakdown by sub-category that enables the developments in the vulnerabilities to be observed with greater granularity.

CREDIT-TO-GDP GAP (a) (b) CHART 3.3

A CREDIT-TO-GDP RATIO AND ITS LONG-TERM TREND



B CHANGE IN CREDIT-TO-GDP GAP BY COMPONENT (YEAR-ON-YEAR) (d)



SOURCE: Banco de España.

a The shaded area shows the last period of systemic banking crisis (2009 Q1-2013 Q4).
b The credit-to-GDP gap is the difference between the credit-to-GDP ratio and the trend.
c The trend in these charts is calculated using a one-tailed Hodrick-Prescott filter (smoothing parameter equal to 400,000).
d The debt securities issued by the non-financial corporations sector are omitted in the chart (their size is residual), although they are included in the calculation of the credit-to-GDP gap.

on the indicators that steer decisions on the Countercyclical Capital Buffer (CCyB), where it has been decided to hold the CCyB rate applicable to domestic credit exposures at 0% since its implementation on 1 January 2016.[5] In the particular case of setting the CCyB, the Banco de España analyses the information from quantitative indicators together with an analysis of qualitative information and its expert judgement as part of a "guided discretionality" arrangement.

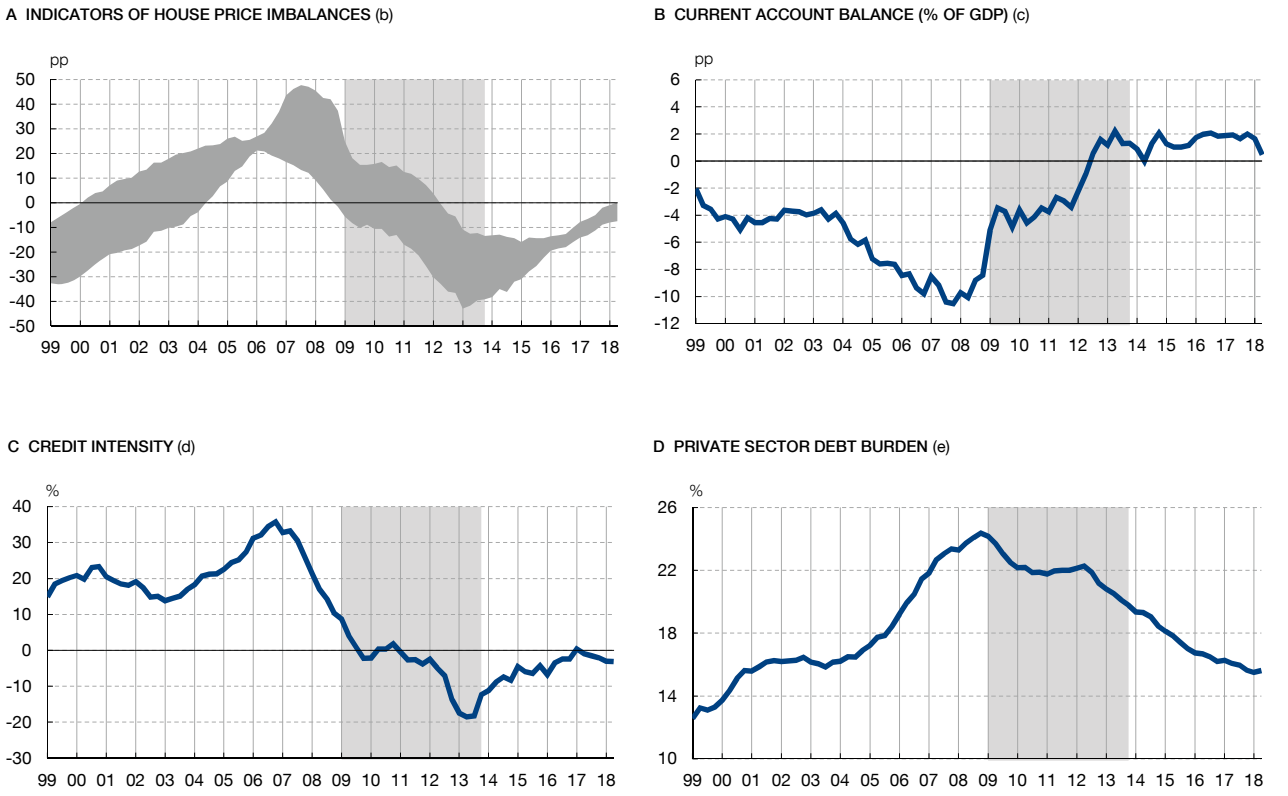
The level of the credit-to-GDP gap remains at values far below that which would advise activation of the CCyB rate

Among the set of quantitative indicators steering decisions on the CCyB, the main reference is the credit-to-GDP gap. This is defined as the difference between the credit-to-GDP ratio and its long-term trend, determined by statistical procedures. This indicator has been proposed by the Basel Committee on Banking Supervision (BCBS) and is incorporated into current European and Spanish legislation as guidance for setting the CCyB.[6] As at March 2018 data, the value for the gap was –50.1 pp. This value is far lower than the level that advises activation of the instrument.[7] The developments in the gap are shown in Chart 3.3.A along with the attendant components, the credit-to-GDP ratio and its long-term trend. In recent quarters the credit-to-GDP ratio has continued on the declining trend on which it embarked as from the last crisis. This reduction is similar to that occurring in the long-term trend, which explains why the values for the gap have stabilised at around –50 pp over the last six quarters.

The change in the gap in year-on-year terms, and the breakdown into its different components (GDP, credit to households, credit to non-financial corporations and long-term trend), is presented in Chart 3.3.B. While the trend component has continued contributing slightly to closing the gap since the end of the crisis, all the components of the credit-to-GDP ratio continue contributing to making it more negative. On one hand, the numerator

5 "The Banco de España maintains the countercyclical capital buffer at 0%", Banco de España Press Release dated 28 September 2018.
6 Directive 2013/36/EU (CRD IV), Law 10/2014, Royal Decree 84/2015, Banco de España Circular 2/2016 and ESRB Recommendation 2014/1.
7 The Banco de España, in accordance with BCBS guidance, considers the level of 2 pp as the reference for a potential activation of the CCyB.

COMPLEMENTARY INDICATORS FOR CCyB DECISIONS (a) CHART 3.4



SOURCE: Banco de España.

a The shaded area shows the last period of systemic banking crisis (2009 Q1-2013 Q4).
b The shaded area represents the range between the minimum and maximum values of the set of five indicators of imbalances in the real estate sector.
c The current account balance series is expressed as a percentage of GDP and seasonally adjusted.
d The credit intensity indicator is calculated as the annual change in credit to the non-financial private sector divided by cumulative GDP of the last four quarters.
e Ratio of debt service in the non-financial private sector calculated as specified in Drehmann M. and M. Juselius (2012) "Do debt service costs affect macroeconomic and financial stability?", BIS Quarterly Review, September.

of the ratio continues to diminish, owing to the negative growth rates of credit, both to households and non-financial corporations. Of these two activities, the decline in credit for non-financial corporations has had a slightly greater weight in recent quarters. On the other, the denominator of the ratio has increased owing to the positive growth of GDP. While the long-term trend also continues to evidence a declining tendency, the effect on the reduction in the credit-to-GDP ratio has been proportionately greater, keeping the gap practically unchanged.

The framework for the activation of the CCyB also considers a set of complementary quantitative indicators…

The statistical procedure used to calculate the trend means that said trend adapts very gradually to the current environment, in which the level of the credit-to-GDP ratio has fallen significantly following the crisis.[8] Given the strong inertia in the trend, the credit-to-GDP gap will not foreseeably undergo changes in sign over a prolonged period of time. However, the framework for the activation of the CCyB also considers a set of complementary quantitative indicators as guidelines for setting the CCyB, with information not captured by the credit-to-GDP gap. In particular, indicators related to credit growth, house prices, debt service and the current account balance (Chart 3.4) are considered.[9]

8 The procedure in question is a Hodrick-Prescott filter with a smoothing parameter equal to 400,000. This parameter, which is particularly high, is designed to estimate a very mild trend that does not react to short-term movements.

9 A technical analysis of the selection of indicators used can be consulted in Castro, C., Estrada, A. and Martínez, J. (2016). *The Countercyclical Capital Buffer in Spain: An Analysis of Key Guiding Indicators.* Working Paper No. 1601. Banco de España.

…which also point to maintaining the CCyB at 0%, although the recent changes in some of them indicate that warning signs for activation might arise before the credit-to-GDP gap reflects these changes

While at present all these indicators also show signs consistent with the decision to maintain the CCyB at 0%, recent developments in some of them indicate that warning signs liable to activate the CCyB might arise before the credit-to-GDP gap is able to reflect these changes. In particular, the indicators related to imbalances in house prices continue to show negative values (Chart 3.4.A), but a clear tendency towards their correction can be observed since the end of the crisis.[10] Also, the dispersion of the values of this group of indicators has diminished, suggesting greater consistency in the signals they emit.

Likewise, the course of the current account balance shows that, although the values for this indicator remain in positive territory or in surplus (Chart 3.4.B), they have fallen considerably during this year. However, the credit intensity indicator (Chart 3.4.C), which captures the annual change in credit relative to GDP, continues to show net reductions in the outstanding balance of credit to the non-financial private sector. Lastly, the indicator of debt service in the private sector continues to reveal that this variable remains on a debt-reduction path.

These differences in the course of the indicators highlight the importance of the ongoing monitoring of each of them, in order to subsequently assess them as a whole, given that the warning signs might not arise simultaneously in all of them.

It is important to complement the individual indicators with models that link credit levels to fundamentals

In addition to the monitoring of other individual indicators, it may be important to complement the signals of the credit-to-GDP gap with more technical tools, mainly those based on models that allow credit levels to be linked to fundamentals. Box 3.1 outlines some recent developments at the Banco de España in this connection.

10 The five indicators comprising the house prices category are: i) the prices gap in real terms constructed as the difference between observed prices and their long-term trend; ii) the gap in the ratio of house prices to household disposable income calculated as the difference between this ratio and its long-term trend; iii) econometric model that compares house prices in real terms with estimates obtained from the long-term trends of household disposable income and mortgage interest rates; iv) gap in the house prices/rental prices ratio, constructed as the difference between the values of the ratio and their long-term trend; v) econometric model that compares house prices in real terms with estimated long-term equilibria considering variables related to household disposable income, mortgage interest rates and fiscal effects. In all cases the long-term trends are obtained with a one-sided Hodrick-Prescott filter with a smoothing parameter equal to 400,000.

The credit-to-GDP indicator may evidence limitations in countries that have witnessed very sharp growth and declines in credit. These limitations may translate into potential sub-optimal CCyB-setting decisions if used mechanically. As discussed, the Hodrick-Prescot filter used in calculating the trend of the credit-to-GDP ratio shows strong inertia, which prevents it from adapting rapidly to the change in the credit market situation. This adds extensive negative bias to the value of the credit-to-GDP gap, which will prevent it from promptly detecting warning signs consistent with changes in the credit cycle in the years immediately following a crisis such as that experienced by the Spanish banking sector.

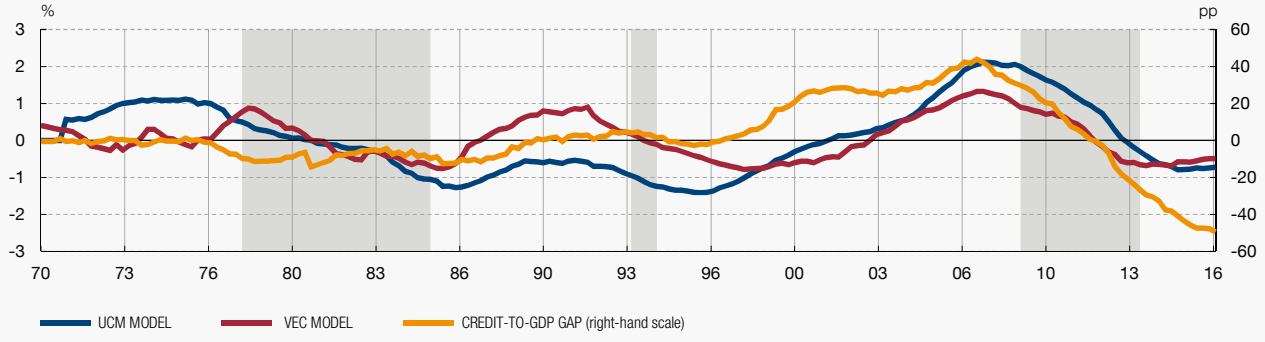
To counter the limitations of the credit-to-GDP gap, growing attention is being dedicated, along with the aforementioned analysis of complementary indicators, to the development of complementary models for the estimation of levels of disequilibrium in the credit cycle based on fundamentals, in order to lessen reliance on purely statistical techniques. In one of these papers,[1] two alternative methodologies for estimating disequilibria in the credit cycle are explored. The adjustment provided by these models is compared for the six biggest EU economies with data since 1970.[2] The first method proposed is a semi-structural unobserved components model (UCM Model), and the second a vectorial error correction model (VEC Model).[3] Compared with the Basel gap, the proposed models tend to provide more accurate signs of the build-up of cyclical risk, and react in a more stable fashion to abrupt changes in credit growth or in other economic relationships.

Chart A compares the results of the new estimates of credit imbalance for Spain derived from the proposed models with the Basel gap. Several notable conclusions may be drawn from the analysis. First, the Basel gap is seen to have not provided signs of imbalance before the two systemic events that occurred in Spain in the late 1970s and during the 1990s. By contrast, these two crises would have been identified by the new analytical models, albeit with nuances. The UCM model would have appropriately signalled the late-1970s crisis, but not the systemic event in the 1990s. For its part, the VEC model would actually have signalled both events, although in the case of the first crisis the signals tend to be belated. Both the analytical models and the Basel gap would have shown signs of imbalance before the last crisis. However, the Basel gap would have generated signs of imbalance on a much more substantial scale excessively ahead (more than 10 years) of the outbreak of the crisis. The estimates obtained with the analytical models appear to be more stable, emitting in both cases clear warning signs around five years before the crisis. This result would suggest that the growth of credit observed from 1999 to 2004 may have been related to changes in economic fundamentals in Spain following euro area membership.

Finally, while the Basel gap shows very significant negative bias after the last crisis, the estimates of negative imbalances derived from the new models tend to stabilise shortly after the end of the last crisis. Indeed, contrary to the Basel gap, the new indicators can be seen to show gaps that have begun to rise, even though they remain in negative territory. These estimates would be more in keeping with the recovery phase in the financial cycle at which Spain currently stands, and in turn may appear more consistent with the information arising from the complementary indicators shown in Chart 3.4. Accordingly, monitoring them might enhance the ability to swiftly detect new imbalances in the credit cycle in the coming years.

1 Galán, J. E. and Mencía, J. (2018). *Empirical Assessment of Alternative Structural Methods for Identifying Cyclical Systemic Risk in Europe.* Working Paper No. 1825, Banco de España.
2 The sample comprises Germany, Spain, France, Italy, the Netherlands and the United Kingdom.
3 The variables considered in both models are total credit to the non-financial private sector, gross domestic product, house prices and long-term interest rates.

Chart A
ESTIMATES OF CREDIT IMBALANCES IN SPAIN. ANALYTICAL MODELS AND BASEL GAP (a) (b)



SOURCE: Galán and Mencía (2018).

a The shaded area shows three periods of financial stress since 1970, corresponding to two periods of systemic banking crisis (1978 Q1 to 1985 Q3 and 2009 Q1 to 2013 Q4) and an idiosyncratic event (1993 Q3 to 1994 Q3).
b The credit-to-GDP gap represents the difference between the credit-to-GDP ratio and its long-term trend, expressed in percentage points. The imbalances arising from the analytical models represent the deviations of the credit-to-GDP ratio from the estimated equilibria, considering fundamental variables, expressed in logarithmic terms.

4 ANNEX

CONSOLIDATED BALANCE SHEET
DEPOSIT INSTITUTIONS

ANNEX 1

Assets	Jun-18	Change Jun-18/Jun-17	Relative weight Jun-17	Relative weight Jun-18
	€m	%	%	%
Cash and balances with central banks	225,847	19.7	5.3	6.4
Loans and advances to credit institutions	190,779	2.3	5.2	5.4
General government	106,693	-10.7	3.3	3.0
Other private sectors	2,049,371	-0.2	57.5	57.7
Debt securities	501,757	-5.2	14.8	14.1
Other equity instruments	42,745	-7.9	1.3	1.2
Investments	28,378	-22.0	1.0	0.8
Derivatives	139,150	-4.6	4.1	3.9
Tangible assets	47,451	-4.8	1.4	1.3
Other	218,482	2.3	6.0	6.2
TOTAL ASSETS	**3,550,654**	**-0.5**	**100.0**	**100.0**
Memorandum items				
Financing to private sector	2,134,485	-0.6	60.2	60.1
Financing to general government	494,014	-4.5	14.5	13.9
Total NPLs	108,232	-21.6	3.9	3.0
Total NPL ratio	3.6	-97 (b)		

Liabilities and equity	Jun-18	Change Jun-18/Jun-17	Relative weight Jun-17	Relative weight Jun-18
	m€	%	%	%
Balances from central banks	226,121	-2.7	6.5	6.4
Deposits from credit institutions	294,329	-4.5	8.6	8.3
General government	103,891	15.7	2.5	2.9
Other private sectors	1,971,853	0.6	54.9	55.5
Marketable debt securities	386,943	-2.2	11.1	10.9
Derivatives	133,953	-4.9	3.9	3.8
Provisions for pensions, tax and other	32,003	-10.8	1.0	0.9
Other	144,263	1.9	4.0	4.1
TOTAL LIABILITIES	**3,293,356**	**-0.4**	**92.6**	**92.8**
Memorandum items				
Eurosystem net lending (a)	169,459	-2.0	4.8	4.8
Own funds	268,581	7.9	7.0	7.6
Minority interests	22,362	-41.9	1.1	0.6
Valuation adjustments relating to total equity	-33,645	43.3	-0.7	-0.9
TOTAL EQUITY	**257,298**	**-2.5**	**7.4**	**7.2**
TOTAL LIABILITIES AND EQUITY	**3,550,654**	**-0.5**	**100.0**	**100.0**

SOURCE: Banco de España.

a Difference between funds received in liquidity-providing operations and funds delivered in absorbing operations. June 2018 data.
b Difference calculated in basis points.

CONSOLIDATED INCOME STATEMENT
DEPOSIT INSTITUTIONS

ANNEX 2

	Jun-18		Jun-17	Jun-18
	€m	% Change Jun-18/Jun-17	% ATA	% ATA
Financial revenue	53,812	-3.1	3.08	3.04
Financial costs	18,546	-8.6	1.13	1.05
Net interest income	35,267	0.1	1.96	1.99
Return from capital instruments	679	-25.7	0.05	0.04
Net financial income	35,946	-0.6	2.01	2.03
Share of profit or loss of entities accounted for using the equity method	2,006	-2.4	0.11	0.11
Net commissions	13,278	2.3	0.72	0.75
Gains and losses on financial assets and liabilities	2,788	-23.2	0.20	0.16
Other operating income (net)	-1,072	–	-0.05	-0.06
Gross income	52,947	-1.8	2.99	2.99
Operating expenses	26,730	0.4	1.48	1.51
Net operating income	26,217	-3.9	1.51	1.48
Asset impairment losses	7,278	-18.1	0.49	0.41
Provisioning expense (net)	2,014	-26.4	0.15	0.11
Income from disposals (net)	-554	–	-0.02	-0.03
Profit before tax (including discontinued operations)	16,371	7.7	0.84	0.92
Net income	11,696	6.4	0.61	0.66
Memorandum item				
Income attributable to the controlling entity	10,101	12.5	0.50	0.57

SOURCE: Banco de España.

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