

## 1 RISKS IN THE MACROFINANCIAL ENVIRONMENT

### 1.1 Macroeconomic environment

#### 1.1.1 INTERNATIONAL ENVIRONMENT

**The global economy has slowed in recent quarters, against a background of persistent trade tensions.** Global GDP grew by 3.6% in 2018, 0.1 pp down on 2017 and below expectations at the start of the year. It moved on a slowing path that steepened in the closing months of the year (Chart 1.1.A). Economic activity remained more robust in the United States, although there have also been signs of some easing in growth recently. In the other advanced economies, GDP growth was also below expectations, especially in the euro area. Against this background, monetary policy in the main advanced economies is adopting a more accommodative stance. Among the emerging economies, the economic indicators in China showed signs of deceleration, to which the authorities responded with new stimulus measures. There is also less dynamism in other regions, in particular in the more vulnerable economies such as Argentina and Turkey. The announced macroeconomic stabilisation programmes in both did not succeed in preventing increased tensions in recent weeks.

**In the euro area, the slowdown in economic activity in 2018 was particularly sharp in the second half of the year.** GDP growth, which stood at 1.8% in 2018, 0.7 pp down on 2017, slowed sharply in the final stretch of the year. This deceleration ran into early 2019 (Chart 1.1.B) and has affected most countries, in particular Germany. The downturn is in response to a lower contribution by the external sector to growth. Behind this lies the weakness, on one hand, of the member countries and, on the other, of products such as investment goods and automobiles, which are very important in respect of European specialisation. Further factors are the past appreciation of the euro, trade tensions and geopolitical uncertainty.<sup>1</sup> Some signs suggest that this weakness in external demand has already begun to feed through to domestic demand, in particular to investment and to employment.

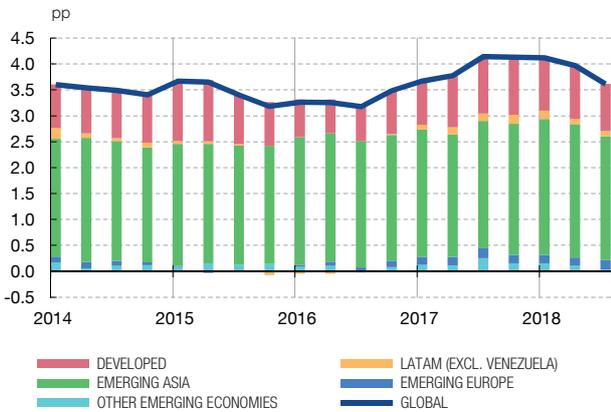
**The outlook for the world economy in 2019 is one of a moderate slowdown, but with significant downside risks.** The recent sluggishness of the global economy has given rise to a downward revision of economic forecasts, in the advanced economies – especially in the euro area – and in the emerging countries (Chart 1.1.C). In particular, the persistency of the slowdown led to a lowering of the ECB's forecasts for 2019 and 2020 in March, to 1.1% and 1.6%, respectively, 0.6 and 0.1 pp less than forecast in December. Of note in this baseline scenario are the risks of more unfavourable than expected developments. These relate to the uncertainty of economic policy (trade policy in particular) and to the possibility of a sharper than foreseen slowdown in some systemic economies, such as China. The Chinese authorities face a dilemma as to whether to stimulate economic activity in the short term, containing the slowdown, at the expense of checking the path of correction of China's macrofinancial imbalances and potentially increasing the risk of a sharper adjustment in the future. Given China's growing weight in the world economy, a sharper than expected slowdown in this country might entail significant global consequences, through the trade, financial and confidence channels, and through the commodities markets (Chart 1.1.D). For the euro area, another major cause for concern is that the recession in Italy may ultimately worsen its fiscal position and Italian banks' balance sheets. Additionally, there is a very substantial risk of a possible disorderly no-deal Brexit.<sup>2</sup>

<sup>1</sup> For further details see Box 2, "The impact of the slowdown in world trade on euro area exports", Quarterly report on the Spanish economy, *Economic Bulletin 1/2019*, Banco de España.

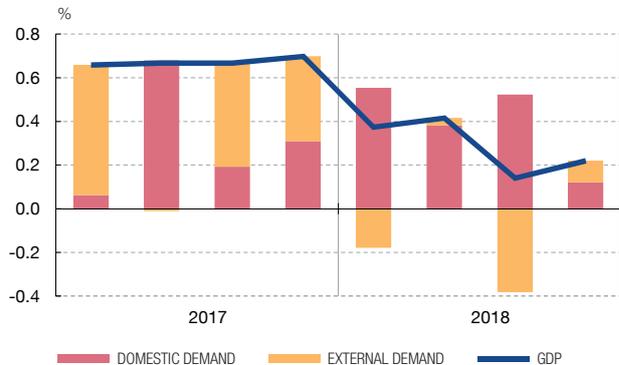
<sup>2</sup> For further details see "Brexit: current situation and outlook", Documento Ocasional No. 1905 (March 2019), Banco de España.

The world economy is continuing to slow down, against a backdrop of significant risks to growth and downward revisions of economic forecasts. The increase in protectionist tensions, the possibility of a disorderly no-deal Brexit, an adjustment in financial markets or a sharper deceleration of the Chinese economy could have a severe impact on global activity.

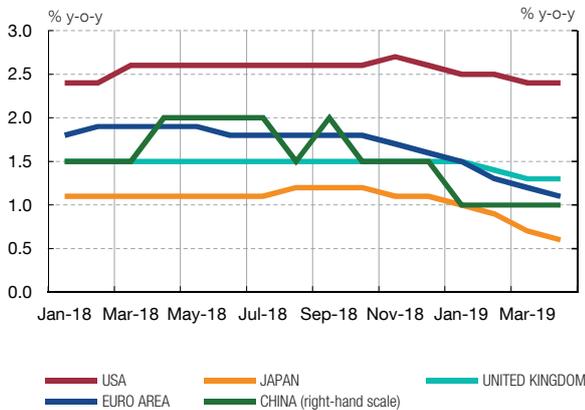
A CONTRIBUTIONS TO GLOBAL GDP CHANGE



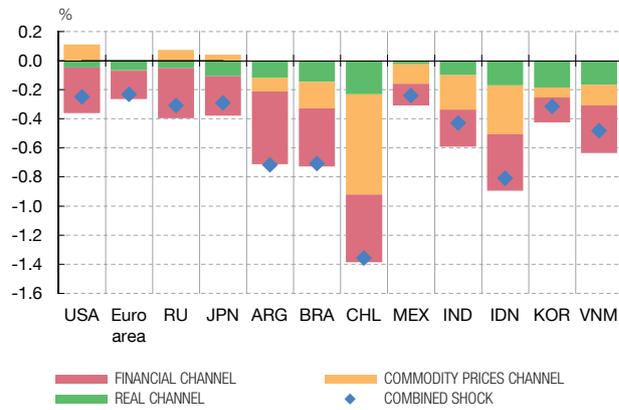
B CONTRIBUTIONS TO QUARTER-ON-QUARTER GDP CHANGE OF THE EURO AREA



C CONSENSUS FORECASTS FOR 2019



D GLOBAL IMPACT OF A DECELERATION IN CHINA (a)



SOURCES: IMF, Eurostat, Consensus, IFS.

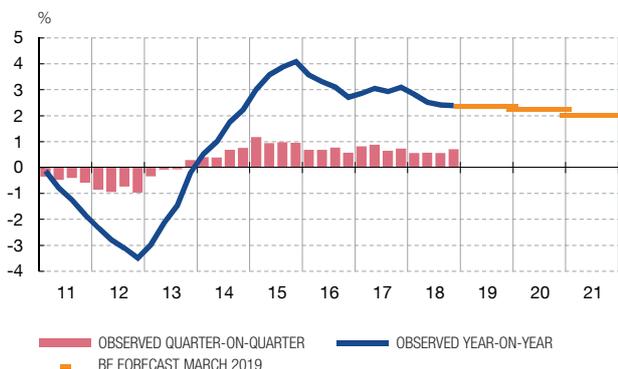
a Simulations using NiGEM. Impact on GDP growth in year one of a fall of 1 pp in potential growth and in domestic demand in China, which entails a decline of 7% in oil prices, of 8% in metal prices and adverse effects on global financial markets (correction of 10% in the stock markets of China, Europe, Japan and USA; increase of 50 bp in share risk premium; and increase of 60 bp in long-term interest rates of emerging economies).

**The risks in the emerging economies of most importance for Spain are also significant.**

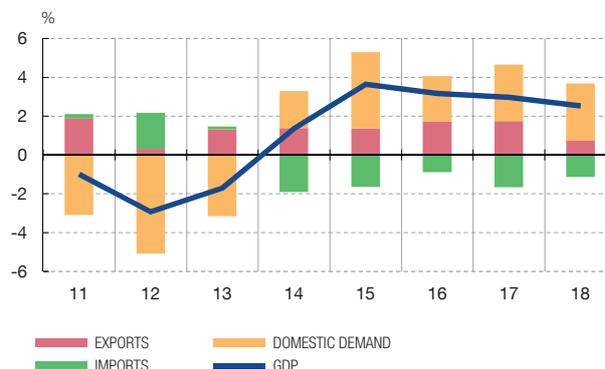
In Brazil, the new government has unveiled its proposal for Social Security reform. It has been favourably received by the markets, but faces a long and arduous process before approval. There is thus a risk that public debt will continue increasing notably in the coming years. In Mexico, there is concern too on the fiscal front, owing to the situation of the state-owned oil company PEMEX, and to the downward revision of the growth outlook for the economy. This has led several rating agencies to place the outlook for Mexican public debt in negative territory. Moreover, uncertainty persists over the performance of the external sector, since the USMCA treaty that is to replace NAFTA has still to be approved in the US, Mexican and Canadian legislative branches. Lastly, Argentina and Turkey continue their slow process of adjustment, with risks both in the external environment, essentially associated with the possible appreciation of the dollar, and on the domestic front. In particular, in Turkey, there is a risk that the recently implemented monetary and fiscal policies will be eased. And in Argentina, the presidential elections scheduled for late 2019

The upturn over the period 2019-2021 is projected to continue, albeit with a gradually slowing profile and downside risks. The buoyancy of GDP is estimated to have been underpinned by robust domestic demand, whereas exports are estimated to have slowed significantly.

A SPAIN. GDP CHANGE



B SPAIN. GDP CHANGE AND CONTRIBUTIONS IN PP



SOURCES: INE and Banco de España.

might raise doubts over the country's future economic policy stance and prompt fresh turbulence on the markets that will hamper the macroeconomic adjustment.

### 1.1.2 SPAIN

**In the final stretch of 2018, the Spanish economy retained its expansionary inertia, which is estimated to have run into the opening months of 2019.** On Banco de España estimates, GDP is expected to have increased by 0.6% in quarter-on-quarter terms in 2019 Q1 (Chart 1.2.A), and by 2.4% year-on-year. As in 2018, this dynamism was mainly underpinned by robust domestic demand, while exports slowed significantly, reflecting the downturn in the external environment (Chart 1.2.B). Employment continued to increase in step with the growth in activity. This was conducive to a fresh decline in the unemployment rate, although it is also moving on a slowing path.

**The short and medium-term outlook is for a continuation of growth, albeit at somewhat lower rates and with downside risks.** The Banco de España's latest macroeconomic projections, published in March, envisage the continuation of the expansionary phase over the 2019-2021 period, but with GDP gradually slowing (Chart 1.2.A).<sup>3</sup> Conditioning this baseline scenario are domestic as well as external risks. Should these materialise, they might translate into a more unfavourable course of economic activity. The risks include most notably those associated with the still-indefinite short and medium-term fiscal policy path and, generally, the future economic policy stance.

## 1.2 Financial markets and real estate sector

### 1.2.1 FINANCIAL MARKETS

**The closing months of 2018 saw an increase in investor risk aversion on global financial markets.** As a result of this, there were across-the-board declines in share prices and increases in credit risk premia (Charts 1.3.A and 1.3.B), rises in volatility and cuts in the yields on top-quality long-term sovereign debt, which acted as a safe haven (Chart 1.3.C). Several factors prompted these developments: the publication of macroeconomic indicators which on the whole disappointed market expectations; the pessimism surrounding US/China trade negotiations; and a US Federal Reserve monetary policy that was less accommodative than expected by the market.

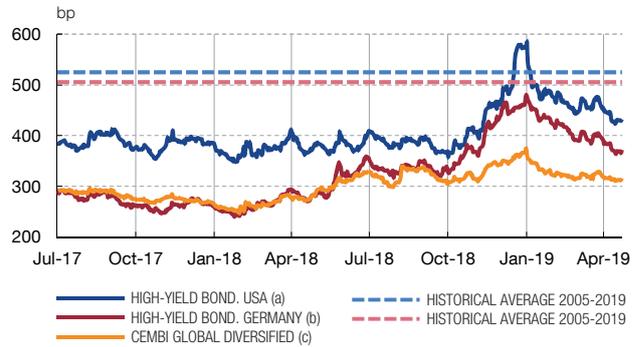
<sup>3</sup> For further details see Box 1, "Macroeconomic projections for Spain" Quarterly report on the Spanish economy, *Economic Bulletin 1/2019*, Banco de España.

Following the bout of instability on global financial markets at end-2018, market indicators have recovered notably in the opening months of 2019 coinciding with the more accommodative stance of the main central banks, among other factors. The financial conditions in the main economies have tightened compared with the situation at the cut-off date of the previous FSR, but they remain lax, as suggested by the stock market rally, the fall in sovereign debt yields, lower corporate spreads and the relative stability of the dollar.

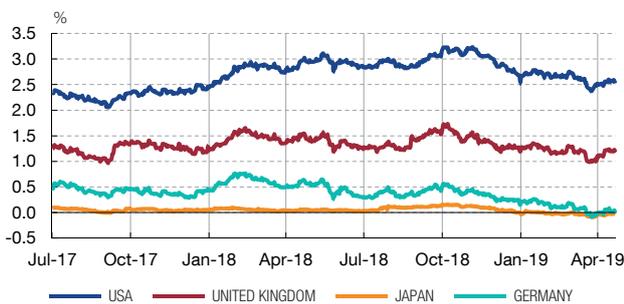
A STOCK MARKET INDICES



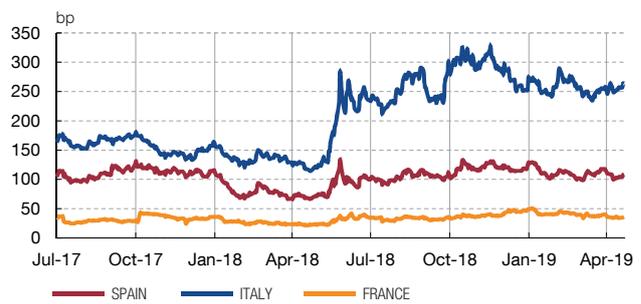
B CORPORATE SPREADS



C 10-YEAR INTEREST RATES



D 10-YEAR GOVERNMENT BOND YIELD SPREAD OVER GERMANY



E BANKING INDICES



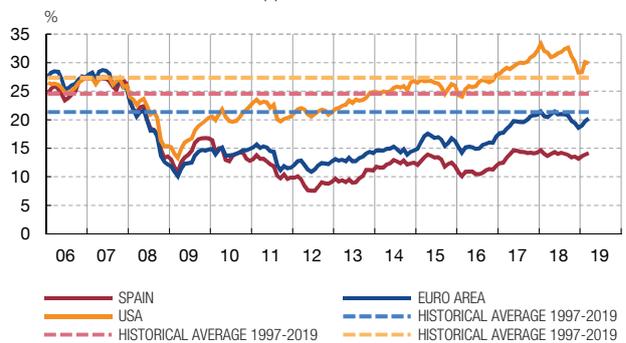
F EXCHANGE RATE AGAINST THE DOLLAR (d)



G GOLDMAN SACHS FINANCIAL CONDITIONS INDEX



H CYCLICALLY ADJUSTED PER (e)



SOURCES: Robert J. Shiller, Datastream, JP Morgan and Bloomberg.

- a Corporate bond spread: "B"-graded Merrill Lynch bond over the US ten-year Treasury bond.
- b Spread of Itraxx Crossover Europe over the German ten-year government bond.
- c The CEMBI (Corporate Emerging Markets Bond Index) Broad Diversified is an index prepared by JP Morgan. It measures the corporate risk of the group of emerging countries and represents the spread of emerging countries' corporate debt yield in dollars over US corporate debt yield.
- d Values higher than 100 denote depreciations of the dollar relative to 1 January 2017.
- e The cyclically adjusted PER is calculated as the ratio of share prices to the ten-year moving average of profits.

**Since the start of the year, the recovery on the financial markets has generally been notable.** Global growth forecasts were admittedly revised downwards. But the more accommodative stance adopted by the US Federal Reserve in the final weeks of 2018 has meant that markets are currently not discounting any rise in benchmark interest rates in the US economy in 2019. Indeed, markets even anticipate a possible cut. That, together with greater optimism over the possibility of a US/China trade agreement, has prompted across-the-board stock market gains and the appreciation of other risky assets in early 2019. The measures implemented by China to counter the slowdown in its economy and some positive surprises in US corporate results also contributed to this pick-up on the markets.

**The ECB has also adopted a more accommodative monetary policy stance.** In March, the ECB Governing Council extended the minimum time horizon over which it expects to maintain its policy interest rates at their current levels (“at least until the end of 2019”). That prompted a further delay in market expectations about the date of the first rate rise in the region.<sup>4</sup> The Governing Council also agreed to launch a series of quarterly targeted long-term refinancing operations (TLTRO-III) commencing September 2019, with the intention of maintaining favourable financing conditions and fluid monetary policy transmission.

**Against this backdrop, bank and several sovereign debt risk premia have fallen on euro area financial markets in 2019 to date. And, at the same time, stock market prices have partly recouped the losses in the final stretch of 2018.** In Spain and Portugal, the risk premium on long-term sovereign debt vis-à-vis Germany has fallen by around 10 bp and 30 bp, respectively, since the start of the year. In Italy, after reaching a budgetary agreement with the European Commission and despite the fact the economy has gone into technical recession, this spread – which was highly volatile in late 2018 – has held relatively stable in 2019. Currently, it stands around 60 bp below its autumn peak (Chart 1.3.D). European banks’ risk premia also fell. Euro area and Spanish bank share prices have recovered since the start of the year, though to a lesser extent than those of US banks. They have also shown greater sensitivity to unfavourable news, as could be seen in February following the release of 2018 results (Chart 1.3.E). In any event, the EuroStoxx banks index on European bourses and on the Madrid Stock Exchange stand over 20% below their levels at the onset of 2018.

**Overall, financial conditions in the main world economies have tightened somewhat compared with the cut-off date for the previous FSR, but they remain easy.** Since early 2019, the stock market pick-up, the decline in sovereign debt yields and the relative stability of the US dollar, following its continued strengthening over much of 2018 (Chart 1.3.F), have contributed to easing global financial conditions. These conditions remain easy in historical terms, despite tightening during the final stretch of 2018 (Chart 1.3.G).

**The materialisation of some of the risks to global economic growth indicated in the previous section might trigger a correction in financial asset prices.** This possible correction might primarily affect those markets showing greater vulnerabilities (cases in point being the leveraged loans and CLOs markets) or higher valuations, such as the US stock market (Chart 1.3.H) and the high-yield corporate debt segment (Chart 1.3.B). From this perspective, it cannot be ruled out that this potential realignment of prices might lead to accelerated asset sell-offs, with potentially disruptive effects on markets.

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<sup>4</sup> For further details see Box 4, “Market expectations about the euro area benchmark interest rate” Quarterly report on the Spanish economy, *Economic Bulletin 1/2019*, Banco de España.

**This potential correction of financial asset prices would adversely affect financial stability in Spain through various channels.** First, it would entail a tightening of financing conditions across various sectors, whose effect on the Spanish economy would be significant given its high external indebtedness. Further, the loss of value of assets might unfavourably affect financial intermediaries through two channels: directly, by affecting the market value of the traded assets held in their portfolios; and indirectly, by reducing household and corporate wealth, which would adjust their spending and investment decisions downwards, thereby amplifying the recent downturn in the macroeconomic environment and impairing the credit quality of banks' loan portfolios.

**The real estate market has prolonged the recovery it embarked upon in 2014.** The recent buoyancy of this market would, inter alia, be a reflection of favourable labour market developments and of highly favourable borrowing conditions for house purchases by households. Since 2013, there has been a slow but progressive absorption of the housing overhang that built up after the crisis (to below 500,000 units at present). A further consequence has been relatively high growth rates in house prices (6.6% year-on-year in 2018 Q4). Overall, average house prices have grown 22% in real terms from their trough in early 2014. That said, they remain 31% below their 2007 Q3 peak (Chart 1.4.A).<sup>5</sup> The indicators and models available, based on aggregate data and subject to high uncertainty, do not show generalised signs of overvaluation. Yet, as can be seen in Chart 1.4.B, some indicators suggest that house prices are now, on average, very close to their long-term equilibrium value, after having stood significantly below this level during the previous years.

**Despite the sector's buoyancy, the levels of the main indicators of real estate activity are lower than those observed in the years in the run-up to the crisis.** For example, the volume of housing transactions stood above 550,000 in 2018, marking a significant recovery from its floor. That said, this remains far below the 885,000 transactions recorded on average in the 2004-2007 period (Chart 1.4.C). The current supply of new housing, proxied by the number of building permits, accounted last year for little more than 10% of the pre-crisis peak. The diminished dynamism of supply in the current cycle compared with the previous expansion would be due, among other factors, to banks applying a more prudent lending policy to the construction and real estate development sector, to the existence of a high stock of unsold houses and to much more moderate growth in new household formation (95,000 in 2018, compared with an annual average increase of 435,000 in the 2004-2007 period). It is worth highlighting with regard to this latter determinant that, although in the final years of the previous expansionary cycle the supply of housing grew more sharply than new household formation, in the current cycle the dynamics of the two series are more closely in step (Chart 1.4.D). That suggests fundamentals have been more supportive of the recent growth in the sector.

**This recovering trend in real estate market activity and prices shows high geographical heterogeneity.** While the recovery is practically across the board in Spain, there are notable regional disparities, in terms both of transactions and prices. The biggest increases have been in the major cities and in coastal areas. There, activity is more dynamic, and the thrust of foreign demand is greater and the population more concentrated.

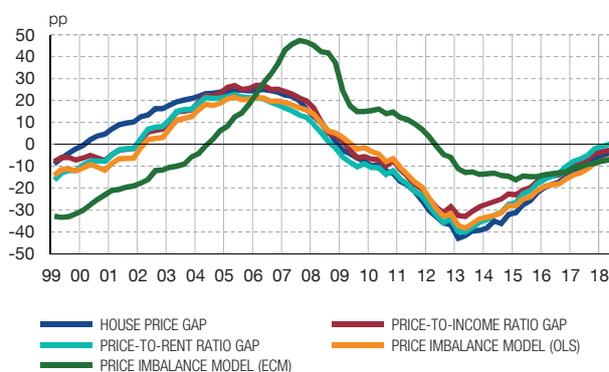
<sup>5</sup> For further details on the real estate sector in Spain, see the Banco de España Analytical Article "[Recent housing market developments in Spain](#)", by P. Alves and A. Urtasun (May 2019).

Real estate market indicators have continued to pick up, although their levels are lower than in the years immediately prior to the crisis. Supply is less buoyant than in the previous upturn, reflecting a more prudent lending policy, an overhang of unsold housing and much more moderate growth in new household formation.

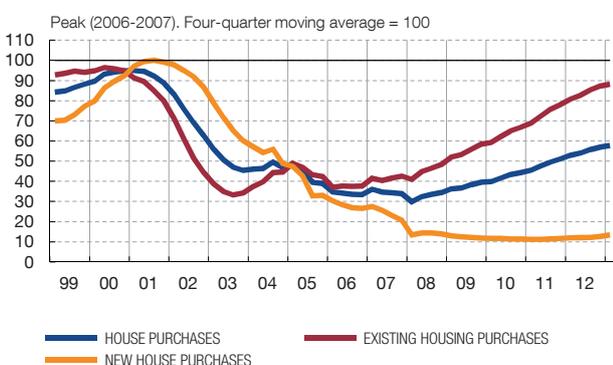
A HOUSE PRICES



B INDICATORS OF HOUSE PRICE IMBALANCES (b)



C TRANSACTIONS



D HOUSING BUILDING PERMITS AND NET HOUSEHOLD FORMATION. UPTURN



SOURCES: ECB, Eurostat, INE and Ministerio de Fomento.

- a Latest observation: 2018 Q4 (house prices), December (housing approvals) and 2018 Q4 (house purchases). Real house prices are deflated using the consumer price index.
- b The five indicators include three gaps calculated as the difference between the value of the interest variable in each period and its long-term trend for: (i) house prices in real terms, (ii) the house prices-to-household-disposable-income ratio and (iii) the house prices-to-rent ratio. Two additional imbalance indicators are included for the house price variable in real terms based on econometric models. The first, which is estimated by Ordinary Least Squares (OLS), compares this variable with long-term trend estimations of household disposable income and mortgage interest rates. A second model, an Error Correction Model (ECM) compares this variable and the long-term equilibrium relationship between household disposable income, mortgage interest rates and fiscal effects. In all cases, long term trends are obtained using a one-tailed Hodrick-Prescott filter with a smoothing parameter equal to 400,000.

**As with purchase prices, rental income has also increased significantly in the recent period and shown high geographical heterogeneity.**<sup>6</sup> The momentum of rental income has been against a background of rising demand for this service, which is particularly marked in the youngest population segment.<sup>7</sup> The greater propensity to rent might be due to various factors. These include the impact of the crisis on this segment, changes in preferences linked to sociological factors and the adoption of measures that have brought the tax treatment of rental and owner-occupancy housing onto a more equal footing and have promoted the supply of rental housing, although some of these have recently been reversed.

<sup>6</sup> On information from the Idealista real estate portal.

<sup>7</sup> See the Banco de España Analytical Article "Evolución reciente del mercado del alquiler en España", by L. Matea and D. López (April 2019).

**It appears necessary here to have a homogenous indicator of new rental prices.**

Renting as a means of covering the demand for residential services is gaining weight in Spanish society, and the information available is not as rich as that for owner-occupied housing. In particular, rental prices can provide key information for the analysis of financial stability. First, they can act as leading indicators of pressures in the demand or supply of residential services that may potentially feed through ultimately to house prices. Further, renting is one of the components of the return on housing, meaning it can be useful for determining the equilibrium level of house prices. Yet to date there is no official statistic on new rental prices for the Spanish economy as a whole and for its different regions and cities that can be used to this end.

**Despite the growing dynamism observed in the sector, the contracting path of the outstanding balance of bank lending to development and construction activities has continued in recent months.**

The total outstanding balance of bank lending to construction and development companies declined by 18.6% in 2018, somewhat up on the previous year. This was essentially due to the high volume of repayments and to the sale of loan portfolios by credit institutions (Chart 1.5.A). In any event, these aggregate data mask high heterogeneity. In particular, Chart 1.5.B reveals that some institutions' credit exposure to the sector increased last year.

**Conversely, mortgage financing to households has been more dynamic.**

New mortgage loans for house purchase increased by 17.1% in 2018, firming the recovery initiated some years back. Although the generation of new lending business is still far off the pre-crisis levels, it is already almost sufficient to offset the repayment of outstanding mortgage debt. As a result, the outstanding balance of household mortgages practically stabilised, following the successive fall-offs observed since the start of the crisis (Chart 1.5.C).

**It is estimated that the conditions of access to mortgage lending<sup>8</sup> have tended to ease in recent years but, after the tightening observed during the crisis, current conditions are stricter than they were before 2008.**

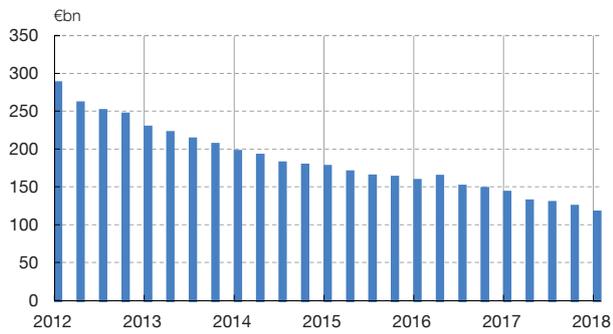
The proportion of high-risk mortgages, measured as those with an LTV (loan-to-value) ratio of over 80%, has held relatively stable over the past 14 years (Chart 1.6.A). But other indicators point to stricter lending conditions now than prior to 2008.<sup>9</sup> This is the case of the LTP (loan-to-price) ratio, which shows a notable loss of weight of mortgage loans with a ratio above 80% (Chart 1.6.B), but also of the LTI (loan-to-borrower's income) ratio (Chart 1.6.C) and of the ratio of loan service (interest plus principal) to borrower's income (LSTI, Chart 1.6.D), whose distributions have shifted towards lower values. In recent years, there has also been a loss of weight in

8 The indicators used to analyse lending standards in mortgages are as follows: (i) Loan-to-Value (LTV): ratio of the mortgage loan capital to the property rated value; (ii) Loan-to-Price (LTP): ratio of the mortgage loan capital to the property transaction price in the property registry; (iii) Loan-to-Income (LTI): ratio of the mortgage loan capital to the borrower's annual income; (iv) Loan Service-to-Income (LSTI): ratio of the first mortgage loan instalment (annualised) to the borrower's annual income; (v) Term: maturity of the operation; and (vi) Interest rate spread: spread between the mortgage interest rate and that of a benchmark interest rate. For greater details on the construction of the LTV and LTP ratios and the changes therein, see the Analytical Article "The loan-to-value ratio for housing in Spain over the period 2004-2016". *Economic Bulletin 1/2019*, Banco de España.

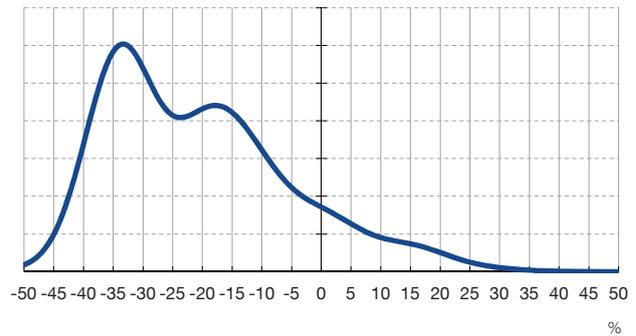
9 The information used in the panels of Chart 1.6 is from the Spanish Colegio de Registradores (Association of Registrars), supplemented with data from the European DataWarehouse (EDW), on the characteristics of securitised loans. The Spanish Association of Registrars provides itemised mortgage loan information on all operations recorded in Spanish property registries. The EDW, for its part, is a repository of bank securitisations, which compiles data on each mortgage loan backing the issuance of these instruments. While the representativeness of this database is much less than that of the Association of Registrars, particularly for after the crisis, the EDW allows a granular (credit by credit) analysis of certain mortgage characteristics, such as the income of borrowers, which is lacking in the Association of Registrars data.

Outstanding credit to developers and builders fell sharply, although developments in credit to this sector are highly heterogeneous. New mortgage loans to households have been growing at a sustained rate. The outstanding amount of this type of credit is beginning to stabilise.

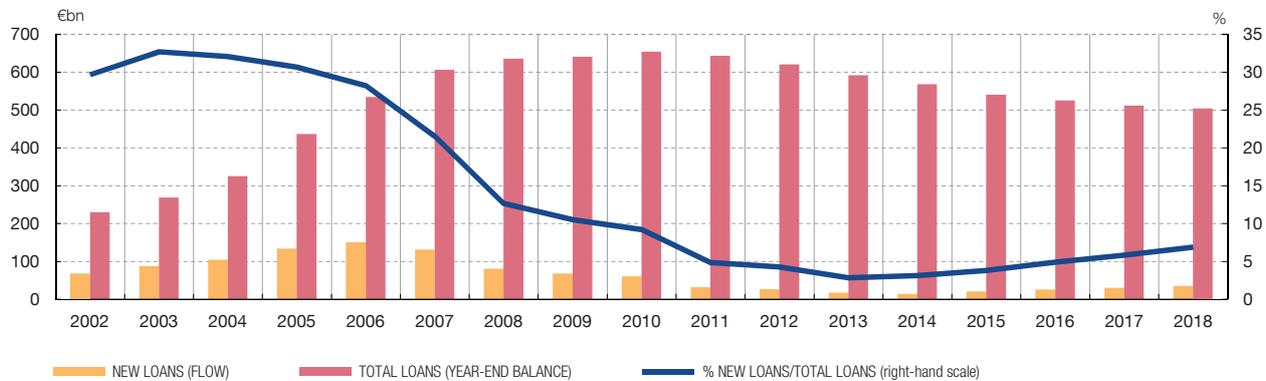
A CREDIT TO THE CONSTRUCTION AND REAL ESTATE ACTIVITIES SECTOR (a)



B CREDIT TO THE CONSTRUCTION AND REAL ESTATE ACTIVITIES SECTOR. DISTRIBUTION OF THE ANNUAL CHANGE IN DECEMBER 2018 (a) (b)



C MORTGAGE LOANS FOR HOUSE PURCHASE (c)



SOURCE: Banco de España.

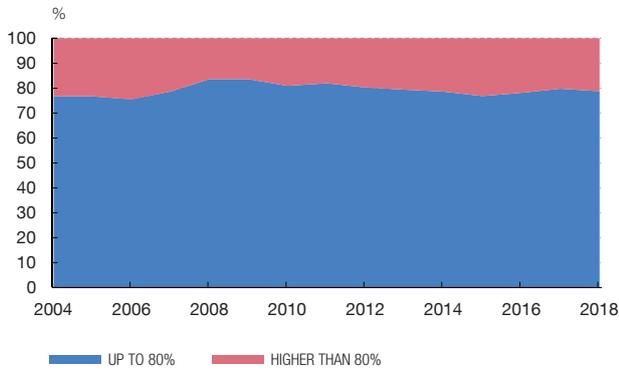
- a The panels refer to the outstanding credit in the construction (including development) and real estate activities sector.
- b The panel shows the density function (or frequency distribution) of the year-on-year rates of change in credit in 2018, weighted by the credit corresponding to each deposit 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.
- c New lending volumes in 2014 relate to the twelve-month period from April 2014 to March 2015, since the 2014 data are not available from January. Total credit in 2014 is taken as the March 2015 figure to make it consistent with the new lending volumes.

mortgages at over 30 years (Chart 1.6.E). Although these interest rates spreads and the dispersion thereof across mortgages have recently narrowed (Chart 1.6.F), these indicators reveal more demanding lending conditions than those observed at the end of the last expansionary cycle. Specifically, the greater dispersion of interest-rate spreads across mortgages compared with the 2006 lows suggests that in the recent period there may have been greater discrimination among operations, whereby those perceived as riskier would pay a comparatively higher premium than less risky operations.

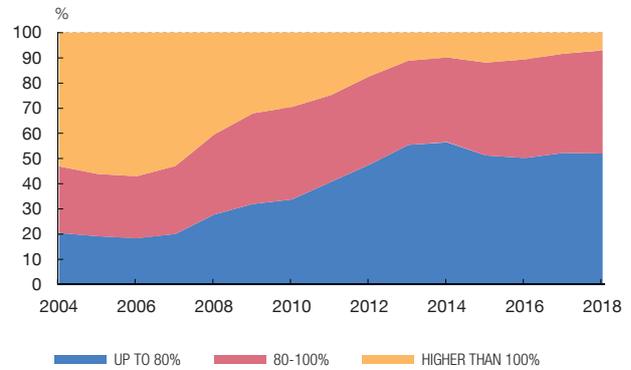
**The new real estate credit agreements law, which will come into force in June, should be conducive to a decline in the current litigiousness in this market. The result should improve market functioning, though it might give rise to some tightening of the conditions applied.** The entry into force of the new mortgage lending law will increase the legal security of these agreements, while strengthening their transparency and customer safeguards. Moreover, the introduction of stricter requirements for assessing borrower solvency should contribute to reducing credit risk in mortgage operations. From the

The proportion of loans with a high LTV (of more than 80%) remained stable. As for the LTP ratio, the weight of loans with a ratio of between 80% and 100% has increased (to the detriment of the segments above and below these values). The ratios which assess the ability to repay mortgages (the LTI and LSTI ratios) are estimated to be far off their pre-crisis levels (an improvement in credit standards). Furthermore, the weight of very long-term loans in mortgage financing remains low, whereas the interest rate spreads on mortgages are beginning to stabilise following a narrowing in recent years.

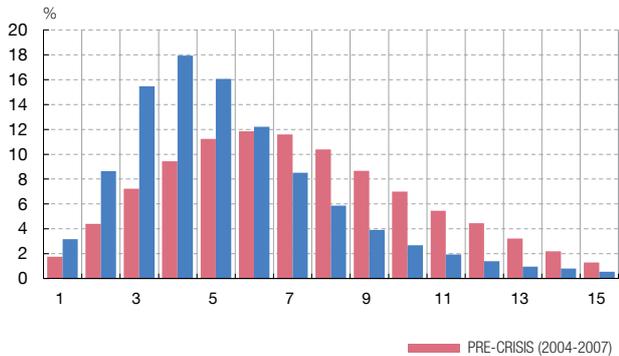
A LTV RATIO. DISTRIBUTION



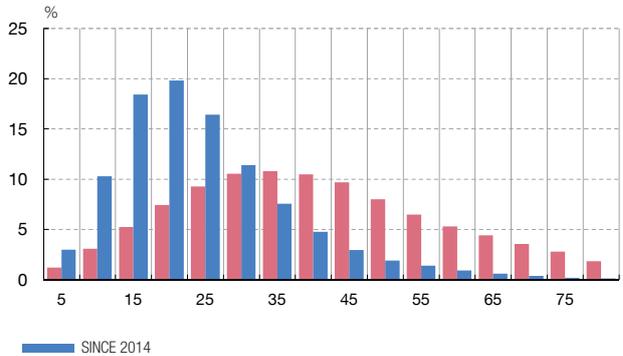
B LTP RATIO. DISTRIBUTION



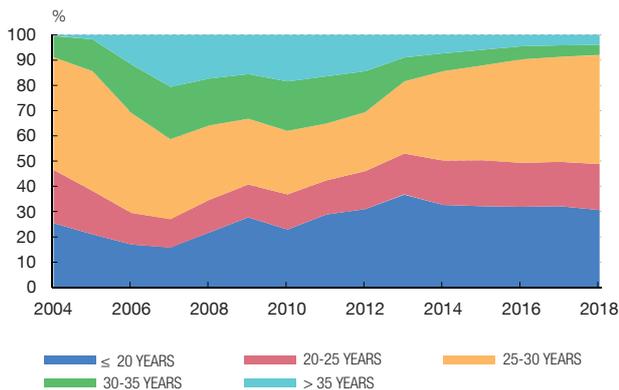
C LTI RATIO. DISTRIBUTION (b)



D LSTI RATIO. DISTRIBUTION (b) (c)



E MATURITIES. DISTRIBUTION



F INTEREST RATE SPREAD (d)



SOURCES: Colegio de Registradores and European DataWarehouse.

- a Loans with housing as collateral and an individual as the borrower are included. The principal of the loans is accumulated (per period) in the distributions in order to define each segment within the distribution. In this chart the following abbreviations are used: LTV (loan to value), LTP (loan to price), LTI (loan to income) and LSTI (loan service to income).
- b The denominator includes the annual income of the main borrower both in the LTI and the LSTI ratios.
- c The mortgage repayment (numerator in the LSTI ratio) or the first monthly payment of the mortgage is annualised. It is calculated assuming that payments are constant over the life of the loan.
- d Spread of forward interest swap rates. The base curve is that of the euro interest rate swap. The reference period is one year for floating rate mortgages and coincides with the maturity of the fixed-rate loans.

standpoint of borrowers, the new regulations increase their protection, but they might also entail some tightening of the conditions applied, especially in the case of the segments with a higher risk profile.<sup>10</sup>

### 1.3 The non-financial sectors

**Overall, new lending to the non-financial private sector continued to expand in most segments, albeit at lower rates than in the first half of the year.** According to the Bank Lending Survey, this slowdown might be due both to demand-side and, to a lesser extent, supply-side factors. However, after years of easing, these financing conditions remain easy. Bank funding and bond-issuing costs remain at historically low levels, without having undergone major changes in recent months.

**This fomented the recovery in the net flow of financing extended to households, which has turned positive since June 2018, in cumulative 12-month terms, for the first time since December 2010** (Chart 1.7.A). Specifically, the financing of this sector showed a year-on-year growth rate of 0.4% in February 2019. This increase is due to the dynamism of consumer credit which, though it has slowed, continues to grow at double-digit rates, offsetting the slight contraction in the stock of financing for house purchase. Box 1.1 analyses the factors behind the recent developments in this portfolio, subject to specific monitoring by the Banco de España.

**The cyclical upturn continued contributing to strengthening households' financial position.** Household gross disposable income notably increased by 3.2% in 2018, boosted by the increase in employment and the rise in wages. Net household wealth continued to recover, underpinned by the increase in real estate asset prices. Household debt also fell as a percentage of GDP (Chart 1.7.C). Specifically, it declined by 2.2 pp on a year earlier to 58.9% (scarcely 1.3 pp above the euro area average). Combined with the low cost of debt, these developments have led the debt burden to continue falling in recent months, albeit very slightly, and to stand at relatively low levels from a historical perspective.

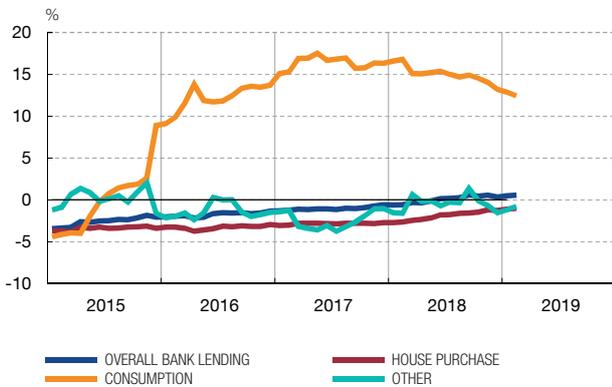
**However, the household saving rate is at a historical low.** Despite the increase in gross household income, the marked growth in household consumption in recent years has prompted a persistent decline in the saving rate to 4.9% of gross disposable income at end-2018 (compared with the low of 5.8% in 2018 in the previous upturn). Such dynamics do not only entail risk as regards the continuity of the robustness observed in consumption, but also with respect to the financial resilience of households in the face of unexpected shocks.

**Moreover, this aggregate view masks high heterogeneity.** The disaggregated information available shows high heterogeneity of households' financial situation. In particular, those that are most vulnerable in the population are the low-income segments. For these groups, the ratio of debt service (including principal repayment and interest) to gross household income is substantially higher than for other households with debt (Chart 1.8.A and B). Specifically, the mortgage debt burden stood in 2017 (the latest available information) at over 50% of income in the decile that includes the lowest incomes, whereas it was around 10% in that of the highest incomes. The outstanding balance of consumer credit accounted in 2018 for 16% of the annual disposable income of households in postcodes in the lowest income distribution quintile, compared with approximately 8% in the case of households in higher-income postcodes.

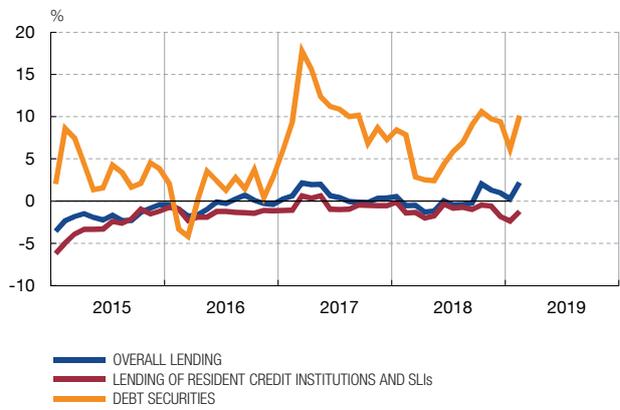
<sup>10</sup> For further details see Box 5 "The law regulating real estate credit agreements", *Economic Bulletin 1/2019*, Banco de España.

Lending to the non-financial private sector has continued its recovery and even posted positive growth rates in the second half of 2018. At the same time, debt ratios have continued their fall, prompting a fresh strengthening of households' and companies' financial positions. The structural budget deficit has not decreased in recent years and, consequently, the subdued decline in the general government debt ratio was due to the cyclical component and GDP growth, which represents a significant risk for the Spanish economy should the economic cycle change.

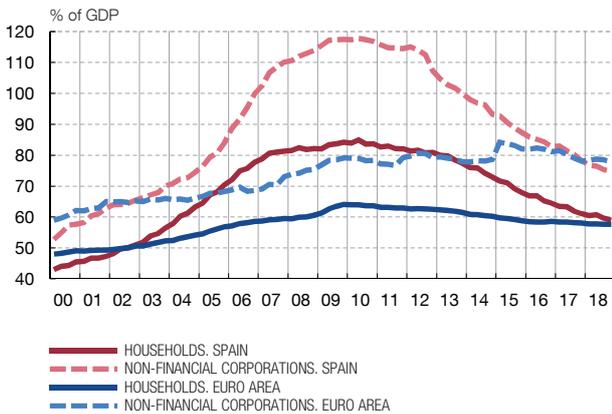
A LENDING TO HOUSEHOLDS BY PURPOSE. Y-O-Y CHANGE



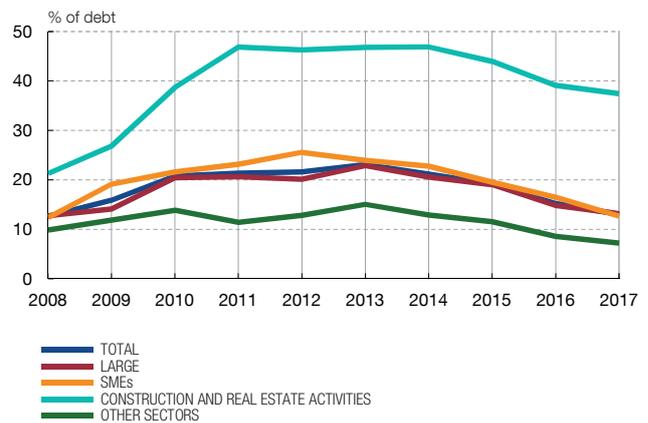
B LENDING TO NON-FINANCIAL CORPORATIONS. Y-O-Y CHANGE



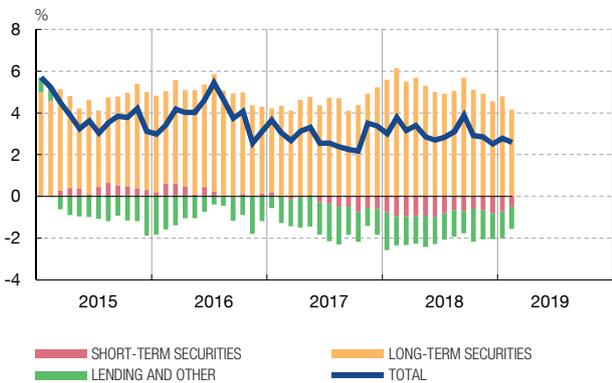
C DEBT RATIOS



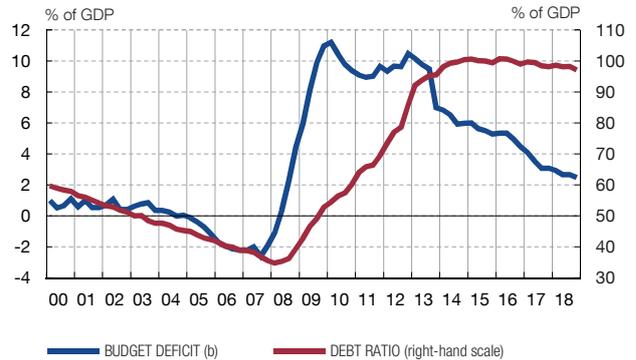
D FIRMS SUBJECT TO GREATER FINANCIAL PRESSURE IN TWO CONSECUTIVE PERIODS (a)



E GENERAL GOVERNMENT FINANCING. Y-O-Y RATES. CONTRIBUTION BY FINANCING INSTRUMENT



F FINANCIAL SITUATION OF GENERAL GOVERNMENT



SOURCES: Datastream, INE and Banco de España.

a The firms bearing a high degree of financial pressure are those for which the ratio (gross operating profit + financial revenue/ financial costs) is less than one.  
 b Four-quarter cumulative data.

This box analyses in greater detail some determinants of the behaviour of the consumer credit portfolio of Spanish deposit institutions. In particular, the size of this portfolio has expanded and the volume of NPLs increased since 2015, developments that have been closely linked to the expansionary behaviour of the segment of credit for the purchase of consumer durables. Specifically, over the last three years, consumer credit extended by deposit institutions and specialised lending institutions (SLIs) in Spain has grown by some €30 billion, increasing from somewhat more than €60 billion in December 2015 to almost €90 billion in December 2018 (i.e. growth of more than 40%). Credit for the acquisition of consumer durables has been the main driver of this growth, with year-on-year growth rates of close to or above 20% since late 2016. However, this growth slowed in the second half of 2018 (14.8% in December 2018, see Chart A).

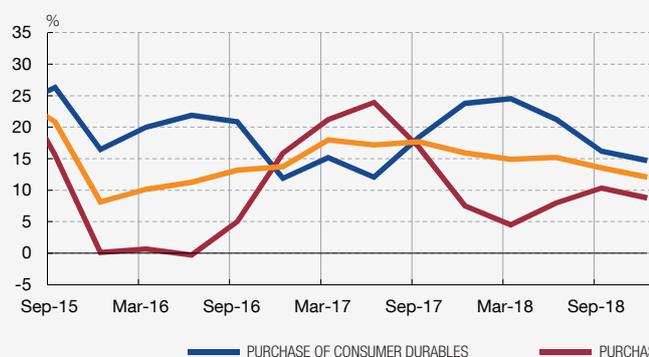
As regards the NPLs in this segment, they began to increase in 2017, reaching growth rates of around 20% by mid-2018, although their growth edged down in the second half of the year, to 18.4% in December 2018 (see Chart B).

One factor that has contributed to the growth of credit mentioned above is the behaviour of SLIs. SLIs are a group of institutions that are not able to take deposits and that tend to grant credit in specific

business segments (consumer credit, mortgage credit, cards, guarantees, etc.). In December 2018, this group of institutions accounted for 4.3% of total credit to the resident private sector. In the case of households, SLIs accounted for 5.6% of all credit granted as at that date. However, the sectoral composition of the credit granted to households by SLIs has been changing in recent years, with the proportion of consumer credit rising, to the detriment of credit for house purchase. Thus, in December 2018, 67% of the credit extended to households by SLIs was for the purpose of acquisition of consumer goods. This reflects the contrasting behaviour of the credit granted by these institutions for house purchase (with negative rates of change in recent years) and for consumption, with year-on-year growth rates of well above 10% since 2014.

The relationship between the consumption of durable goods and disposable income enables us to obtain an indicator of the possible existence of restrictions on lending for the consumption of this type of goods. This is because one would expect the correlation between consumption and disposable income to be lower (higher), the smaller (larger) the percentage of restricted agents. Chart C shows the estimation for different periods of the parameter associated with disposable income in a regression model that relates this variable to the aggregate consumption series. The estimates for pre-crisis

Chart A  
YEAR-ON-YEAR RATE OF CHANGE OF CONSUMER CREDIT AND ITS COMPONENTS  
Deposit-taking institutions and specialised lending institutions



SOURCE: Banco de España.

Chart B  
YEAR-ON-YEAR RATE OF CHANGE OF NON-PERFORMING CONSUMER CREDIT AND ITS COMPONENTS  
Deposit-taking institutions and specialised lending institutions



Chart C  
RELATIONSHIP BETWEEN DURABLE GOOD CONSUMPTION AND DISPOSABLE INCOME



SOURCES: Banco de España and INE.

Chart D  
BREAKDOWN OF CONSUMER CREDIT SUPPLY AND DEMAND FACTORS. (a)



a The chart divides y-o-y growth (measured for each quarter) into two portions which relate to supply and demand factors. The breakdown is based on an SVAR

periods indicate that credit restrictions were at very low levels. The higher correlation estimated after the start of the crisis suggests that these restrictions increased significantly, to reach a peak in 2014. A change in trend is observed thereafter, and a reduction – albeit not continuous – has dominated in recent years. This suggests that greater access to bank credit, in the form of a significant increase in consumer credit, has enabled households to smooth their durable goods consumption. In addition, the shocks to the supply and demand for credit for the purchase of durable goods are analysed using a structural vector autoregressive model (SVAR). This model allows us to estimate the contemporaneous effects of shocks associated with supply and demand on changes in consumer credit and interest rates. Chart D shows the historical decomposition of supply and demand factors in the growth of credit for the purchase of durable goods (in cumulative year-on-year terms) between 2004 and 2018.

This chart shows, for example, how growth in this segment has been above 10% year-on-year practically every quarter since the beginning of 2015. Before the 2008 crisis, growth in this type of credit was associated both with supply and demand factors, although supply factors made a larger contribution. When the crisis arrived supply factors appear to have been more important in explaining the decline in credit during the first stage (2008-2010) and the last stage (2013-2014) of the credit contraction period from 2008 to 2014. By contrast, demand factors were the main determinants of the decline during the middle years (2010-2012) of this period. Finally, since late 2014 both types of factor have been contributing in very similar proportions to the increase in consumer credit for durable goods.

An analysis was also performed for consumer credit as a whole, to determine which bank characteristics are most closely related to the growth of total credit and NPLs. For this purpose, a panel was considered – with half-yearly frequency, from June 2015 to June 2018 (seven periods) – with data on the 30 individual institutions with the highest relative weights in the consumer credit portfolio. The model estimated includes temporary fixed effects to control for the set of systemic factors and individual effects to control for

cross-bank heterogeneity. The following explanatory variables were considered: the return on assets (ROA), the average interest rate on consumer credit, the book solvency ratio, the net interest margin, the NPL ratio for the consumer credit portfolio, the institution's market share in total consumer credit and total assets.

With regard to the growth of the stock of consumer credit, this appears to be inversely related to the level of rates applied by institutions, their ex-ante return on assets and their market share. This suggests efforts to secure a greater presence and higher returns by expanding the consumer loan portfolio, an objective attained by means of lower interest rates (see Chart E).

In addition, as regards the growth of NPLs in the consumer credit portfolio, it is striking that those institutions with the highest NPL ratios seem to be the ones experiencing the smallest increases in NPLs. This suggests that a certain convergence is occurring in the average credit quality of consumer credit portfolios and that institutions with a lower initial portfolio quality have limited their expansion in this segment. The initial return on assets appears to be negatively correlated with the growth of NPLs, and also with the growth of total consumer credit, while the other explanatory variables show no significant effects (see Chart F).

In short, consumer credit continues to grow at double-digit rates, although it slowed significantly in the second half of 2018. Supply and demand patterns lie behind these developments, in particular the desire of institutions with a low market share to increase their weight in this segment. On the other hand, highlighting a certain fragility in the demand for credit in a very benign macrofinancial context, NPLs are rising at double-digit rates and accelerating.

The Banco de España will continue to monitor these developments closely. So far, they do not pose a risk to the stability of the Spanish financial system as a whole, nor do they require the adoption of macroprudential measures, but greater vigilance is needed in relation to credit conditions and the most dynamic institutions in this segment need to be monitored.

Chart E  
CHANGE IN TOTAL CONSUMER CREDIT. SENSITIVITIES (a)

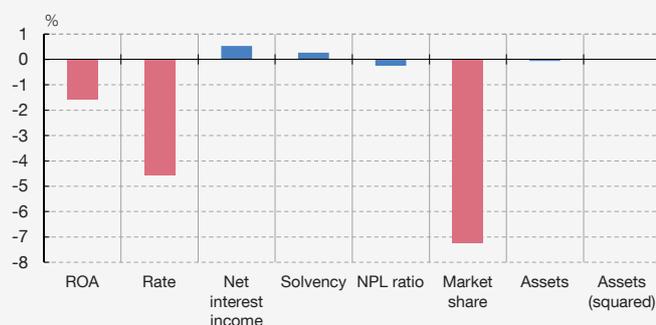
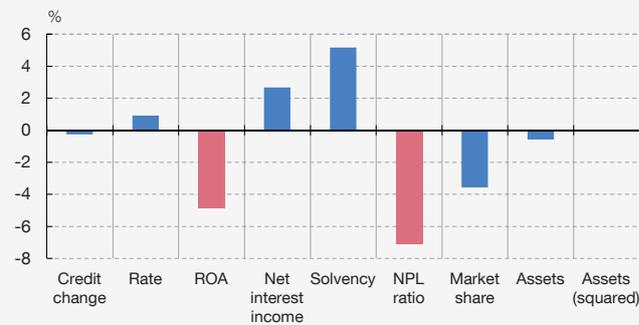


Chart F  
CHANGE IN NPLs FOR CONSUMER CREDIT. SENSITIVITIES

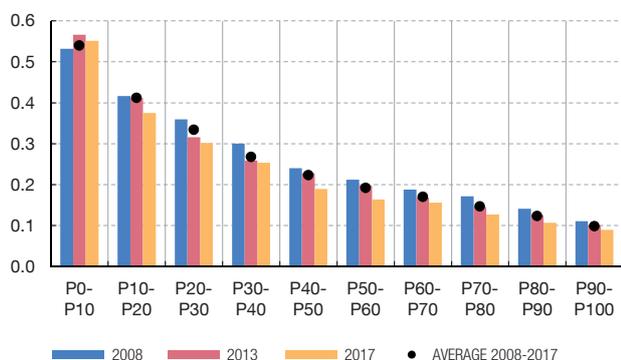


SOURCE: Banco de España.

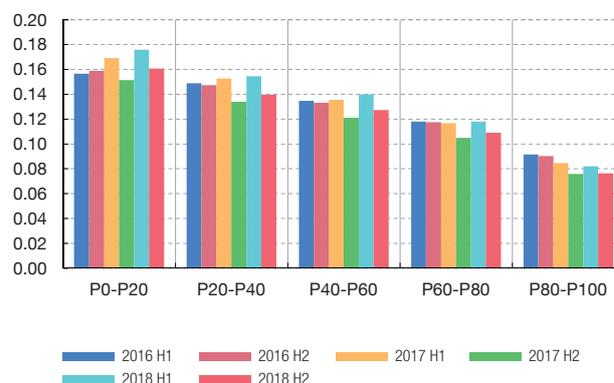
a ROA = return on assets, Rate = average interest rate on consumer credit. Net interest income = ratio of interest income to assets, Solvency = accounting solvency ratio, NPL ratio = NPL ratio for the consumer portfolio, Market share = market share of the institution in total consumer credit, Assets = total assets in the balance sheet, Assets (squared) = total assets in the balance sheet, squared. Statistically significant effects set at 5% are shown in red. For each explanatory variable, the panel data analysis shows the related regression coefficients.

The breakdown of the available information shows that the financial position of households is highly heterogeneous. In particular, the most vulnerable segments of the population are those with the lowest income. The household debt (including repayments and interest) to income ratio is substantially higher for these segments than for other indebted households.

A HOUSEHOLD DEBT/GROSS INCOME



B AMOUNT OF CONSUMER LOAN/GROSS INCOME



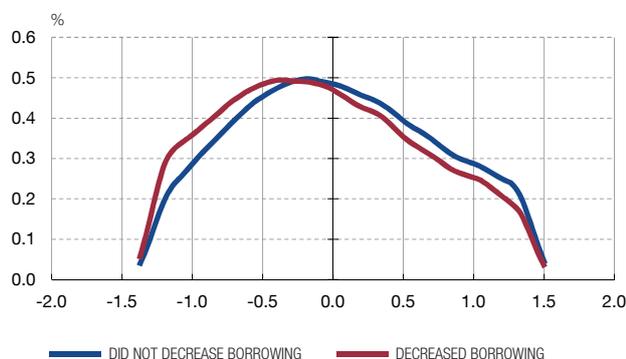
SOURCES: INE, Ministerio de Hacienda and Banco de España.

a The value of the ratio for the percentile range of the income distribution of the population indicated is shown on the x-axis for each date. Panel A was obtained from the Living Conditions Survey and Panel B by using information on post codes from the Central Credit Register and on personal income tax from the Ministry of Finance.

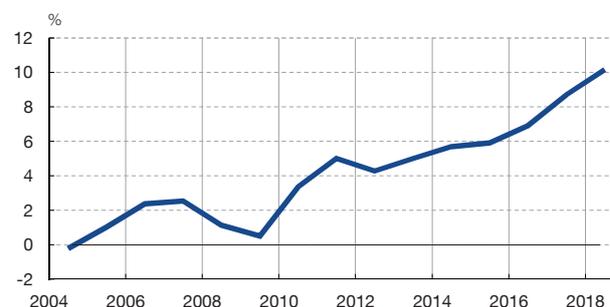
## PRODUCTIVITY OF FIRMS AND BANK FINANCING

Available empirical evidence suggests that, after the crisis, banks discriminated between firms to a greater degree based on their credit quality and productivity levels when extending new loans. This should contribute to containing the rise in NPLs in future.

A PRODUCTIVITY DENSITY KERNELS FOR FIRMS THAT DID NOT DECREASE THEIR BORROWING IN 2018 AND OTHER (a)



B ACCUMULATED IMPACT OF PRODUCTIVITY ON THE CHANGE IN LENDING TO NON-FINANCIAL CORPORATIONS (b)



SOURCE: Banco de España.

- a Total factor productivity is obtained from sectoral regressions of the logarithm of sales relative to the logarithms of total capital, inputs and employment and temporary controls. An estimation of the weights of capital and employment in the firm's production function is obtained. That used here is normalised.
- b The differential impact was estimated for each date with respect to the two years prior to increasing productivity in a standard deviation through a regression of the change in bank financing at firm level on productivity and other firm-level and supply controls. Next, for each year the value estimated previously has been accumulated from 2004, thus obtaining a measurement of the impact on growth of the supply of lending to non-financial corporations associated with an increase in productivity from the first period analysed.

**Net flows of overall financing of non-financial corporations have also held at positive levels since October, in cumulative 12-month terms (Chart 1.7.B).** In February 2019, this sector's financial debt was growing at a year-on-year rate of 1.7%. Behind this aggregate performance are two very differentiated dynamics. On one hand, the loans by non-residents to non-financial corporations and the outstanding balance of fixed-income issues by these corporations have expanded in year-on-year terms in recent months, with the latter variable showing marked dynamism. On the other, the outstanding balance of credit provided to these corporations by resident credit institutions has

continued shrinking in year-on-year terms, with the rate of decline in recent months having increased. In any event, if the real estate and construction sectors are excluded, the decline is much more moderate. Moreover, the empirical evidence available suggests that, post-crisis, banks have discriminated to a greater extent among companies on the basis of their creditworthiness and their productivity (Chart 1.9.A and B) when assigning new credit flows. That should contribute to containing the increase in non-performing loans in the future. In this respect, Box 1.2 reviews the overall trend in financing to highly indebted companies, placing Spain's situation in this context.

**The economic and financial position of the non-financial corporations sector has also continued strengthening.** The debt-to-GDP ratio fell in 2018 by 3.5 pp to 74.5%, standing 3.4 pp below the euro area average (Chart 1.7.B). This, combined with the low cost of debt, has led this sector's debt burden to continue declining in recent months to historically low levels. According to the Banco de España Central Balance Sheet Data Office, non-financial corporations' ordinary profits increased by 5% in 2018, raising the return on equity by 0.8 pp in relation to the previous year. However, this aggregate view also masks high heterogeneity, meaning that there are still some vulnerably positioned segments concentrated in the group of smaller enterprises and, above all, in those operating in the real estate and construction sector (Chart 1.7.D).

**Public-sector financing conditions have continued to be very favourable.** Indeed, the interest rates on sovereign debt, which is the main source of financing for this sector, have held at historically low levels in recent months. They have even proved relatively insensitive to the political and fiscal uncertainty in Italy, which notably raised Italian sovereign debt issuing costs in the second half of 2018. That has allowed this sector to continue meeting its need for funds through long-term fixed-income securities, reducing its debtor positions in the form of short-term bonds and loans (Chart 1.7.E), and thereby raising the average life of outstanding debt and cutting back refinancing needs in the near future.

**In any event, the high level of the ratio of public debt to GDP is a source of vulnerability for the Spanish economy.** This ratio dipped to 97.1% of GDP in 2018, 1 pp down on 2017, but still 12 pp above the euro area average (Chart 1.7.F). Behind this decline is the increase in nominal output and the progressive reduction in the budget deficit. In particular, the general government budgetary imbalance fell by 0.6 pp in 2018 to 2.5% of GDP. This was, however, thanks to its cyclical component, as no improvement has been seen in its structural component since 2013. High public debt is a major factor of vulnerability for the Spanish economy ahead of potential rises in the cost of financing (although the lengthy maturities of public debt reduce refinancing risk) and of more adverse than expected developments in economic activity.

**The Spanish economy's high negative net international investment position (IIP) is also a factor of vulnerability ahead of potential turbulence on international financial markets.** Admittedly, the nation's negative net IIP has fallen by almost 21 pp of GDP since 2014. But it still stood at 77.1% of GDP in late 2018, a high level in historical terms and relative to other countries. That gives rise to a potentially significant degree of vulnerability ahead of any worsening in international capital markets (see Box 1.3).

Growth in leveraged loan issues<sup>1</sup> and in issues of securitisation instruments using leveraged loans as their underlying asset, especially Collateralised Loan Obligations (CLOs), and the possible easing of credit standards associated with these instruments, have been identified by various regulators<sup>2</sup> as significant risk factors for the stability of both the European and the US financial systems. Chart A shows that the overall volume of leveraged loan issues has indeed been very significant in recent years, with record issuance in 2017 of over €220 billion in Europe and over €1.36 trillion in the United States and with just a slight moderation in these volumes in 2018 (on average, US issuance amounts to six times European issuance throughout the period 2013-18). The aggregated data also show the declining significance, both in the United States and Europe, of high-yield (below investment grade) bond issues compared with leveraged loans provided directly by the banking sector to fund corporations with the most highly leveraged financial structures.

CLO issuance in Europe tripled between 2013 and 2018, while in the United States it rose by around 60%. However, in each of those years, the volume of issuance remained much higher in the United States than in Europe (see Chart B). In any event, CLO issuance<sup>3</sup> is growing against a backdrop of broader recovery in the securitisation market; in fact, towards the end of the period indicated, CLOs declined as a proportion of the total volume of Collateralised Debt Obligations (CDOs), which is a broader category of which CLOs are a fraction.

Beyond identifying these overall patterns, this Box aims to provide an in-depth analysis of leveraged loan issuance in Europe and of Spanish banks' exposure to leveraged non-financial corporations. If European corporations' leveraged loan

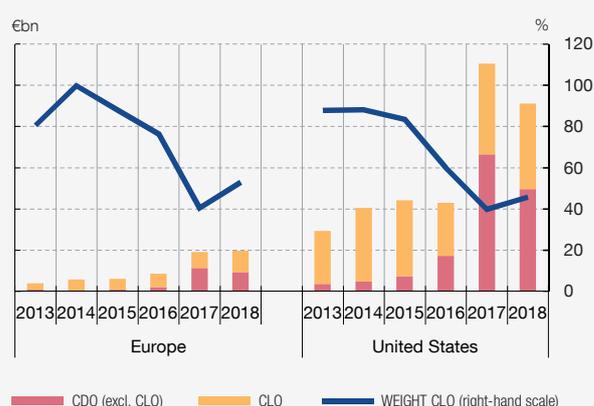
issues are broken down by controlling parent company nationality (see Charts C and D), the United Kingdom comes out top both in 2017 (€131 billion) and 2018 (€74 billion), although in 2018 with a considerably narrower margin over the second-placed country (Germany, with €53 billion). The leveraged loan issuance volume of corporations whose parent group is based in Spain is much smaller (€26 billion in 2017 and less than €10 billion in 2018) and behind that of other countries (see Chart C). In all the countries considered there is a high percentage of loan issues in which significant banks (identified as participants in the EBA's transparency exercise for each country in the study) that share the same country of residence as the borrowers' parent companies participate. This figure is over 70% in both years in France, Spain and Italy, which is the country with the highest rate of national participation.<sup>4</sup>

- 1 There is no single definition of a leveraged loan; a debt instrument may be classified as such according to its rating or risk premium or according to accounting measures, such as a debt-to-EBITDA ratio over 6.
- 2 In its May 2018 Financial Stability Review, Box 5: Leveraged loans: a fast-growing high-yield market (pp 74-78), the ECB identified these developments as potential financial stability risks. The Federal Reserve, in its November 2018 Financial Stability Report, also identified an increase in 2017-18 in risky debt issuance (leveraged loans and speculative grade bonds) by non-financial corporations (pp 19-20) and in CLO issuance (pp 28-29), and noted the high tolerance for risk-taking with respect to non-financial corporations' debt as a vulnerability factor.
- 3 Leveraged loans are not the only possible underlying asset in CLOs, but they are the best proxy for the volume of securitisations linked to these loans.
- 4 On the data available, it is only possible to identify the participation of national banks in syndicated loans marked as leveraged loans on Thomson Reuters, but not the amount of risk assumed.

Chart A  
ISSUANCE OF LEVERAGED LOANS AND HIGH-YIELD BONDS (a)



Chart B  
CDO/CLO ISSUANCE (b)



SOURCES: Thomson Reuters, Dealogic, SIFMA-AFME, SIFMA, Datastream and Thomson Reuters Leveraged Loan Monthly - March 2018 and Year End 2018, Reuters Bond News November 2018.

- Leveraged loans are syndicated loans classified as leveraged or highly leveraged loans by Thomson Reuters based on a list of credit quality criteria. High-yield bonds are bonds classified as lower than investment grade in the Dealogic issuance database. The European issues relate to debtors the nationalities of whose parents are the major European economies (Germany, United Kingdom, France, Italy and Spain). Issuance data from Thomson Reuters shown in dollars are converted to euros using the euro/dollar exchange rate at the issuance date.
- SIFMA data on issuance of CDO and CLO securitisations, as well as Thomson Reuters' data on CLO issuance in the United States reported in dollars are converted each year at the related average euro/dollar rate. European CLO issuance data for 2018 relate to the January-November period.

Chart C  
FLOW OF LEVERAGED LOAN ISSUANCE BY COUNTRY OF BORROWER (a)

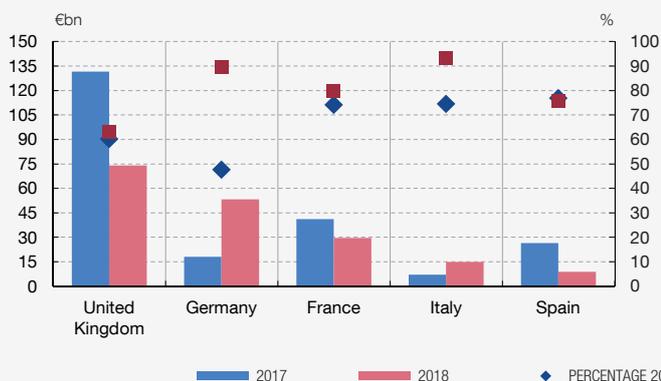
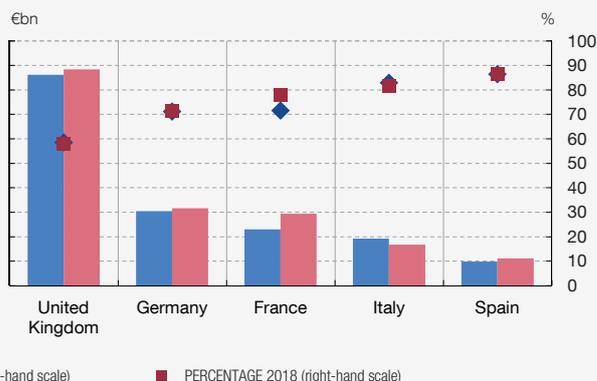


Chart D  
STOCK OF LEVERAGED LOAN ISSUANCE BY COUNTRY OF BORROWER (a)



SOURCE: Thomson Reuters.

a The chart relating to issuance flow considers loans arranged in 2017 and 2018. The stock of issues in a given year considers all issues with arrangement dates until December of that year and loan maturity dates after December of that year, i.e., the balance of issues outstanding is considered. Percentages in 2017 and 2018 indicate the proportion of issues linked to borrowers in a country in which banks of that country intervene (significant institutions participating in the latest EBA's transparency exercise) in their capacity as T1er 1 agents of the bank syndicate providing the loan. The borrower's country is identified with the country of residence of its latest parent company.

Chart E  
SYNDICATED LOANS TO NON-FINANCIAL CORPORATIONS



Chart F  
SYNDICATED LOANS TO NON-FINANCIAL CORPORATIONS  
As a percentage of loans to non-financial corporations



SOURCE: ECB.

Analysis of the total stock of outstanding leveraged loans at December 2017 and 2018 (see Chart D) offers similar conclusions to the flow analysis. Once again the United Kingdom is the most frequent country of residence for groups issuing leveraged loans (with €441 billion in 2018), significantly ahead of the second-placed country (France, with €158 billion in 2018). Considering total issuance, issues corresponding to Spanish borrowers are higher than issues corresponding to Italian borrowers (€83.3 billion compared with €53.3 billion in 2018).

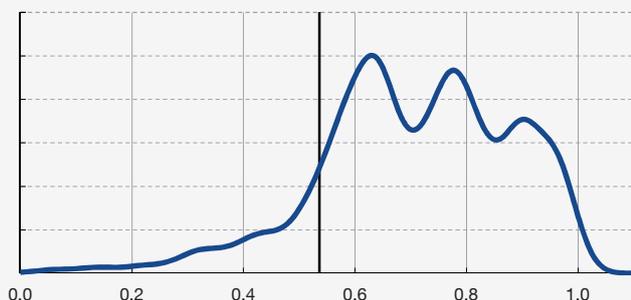
Leveraged loans are generally classified as a subsegment of the broader market for syndicated bank loans, which do not only include loans extended to highly leveraged corporations.<sup>5</sup> In any event, European banks' exposure to syndicated loans (see Chart E) is another useful proxy for exposure to leveraged loans, as it represents a maximum level. Euro area banks' exposure to

syndicated loans to non-financial corporations saw no significant change in the period 2012-18, but there are notable differences between one country and another. Cumulative growth in these syndicated loans in the period 2012-18 was approximately 16% in Germany and 30% in France, clearly expanding since 2014 and 2016, respectively. By contrast, both Spain and Italy saw cumulative declines of around 22%.

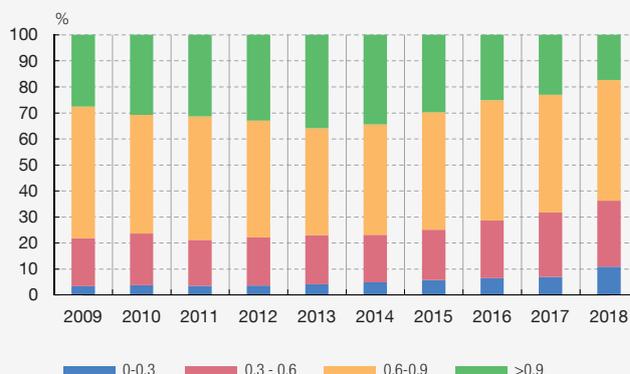
In 2018, exposure to syndicated loans at the European level (EU average) amounted to approximately 13.2% of total credit exposure to non-financial corporations, 1.3 pp more than in 2012 (see Chart F). This ratio has evolved quite differently from one

<sup>5</sup> Thomson Reuters includes, in its list of leveraged loans, syndicated bank loans that are classed as leveraged or highly leveraged based on a list of credit quality criteria.

**Chart G**  
DISTRIBUTION OF THE DEBT TO ASSET RATIO BY EXPOSURE DRAWN DOWN IN SYNDICATED LOANS (a)  
December 2018



**Chart H**  
PERCENTAGE OF VOLUME DRAWN DOWN BY DEBT RATIO BUCKET. LARGE FIRMS (b)



SOURCE: Banco de España.

- a The panel shows the density function (or frequency distribution) of the debt ratio (total long- and short-term debt as a percentage of total assets) for firms with syndicated loans from Spanish deposit-taking institutions, weighted by the CCR credit amount as at December 2018 for each ratio category. This density function is approximated through a kernel estimator which allows a non-parametric estimate of the density function, yielding a continuous and smoothed graphic representation of that function. The vertical line indicates the median of the debt ratio measured for the group of large firms in the Central Balance Sheet Data Office (CBSO) of the Banco de España at the latest available date.
- b The distribution of this panel is obtained by cross-checking the CBSO data, selecting such institutions that individually meet the requirements to be classified as a large firm in terms of number of employees, sales or total assets in accordance with Regulation EU 651/2014, with the CCR. CBSO data are used to classify the firms based on their debt ratio and CCR data provide the volume of drawdown exposure of Spanish banks to each of these categories. The year shown in the panel refers to measurement of the drawdown amount in the CCR (e.g. 2018), with the classification by debt ratio relating to the previous December (e.g. 2017).

country to another. In the case of Germany, Italy and France, a Ushaped pattern is observed, returning in 2018 to the 2012 level in the case of Germany and Italy and continuing to rise moderately in the case of France. By contrast, in the case of Spain the ratio is clearly climbing: as a percentage of total loans to non-financial corporations, syndicated loans rose from 11.9% in 2012 to 17.1% in 2018. This, together with the drop in absolute terms in syndicated loans granted by Spanish banks observed in Chart E indicates that the decline in volume in these loans has been less than the decline in volume in overall lending to non-financial corporations.

Although not all syndicated loans are granted to highly leveraged corporations, Chart G shows that in December 2018 the distribution of the debt ratio (total short and long-term debt to total assets) by volume of syndicated loans at Spanish deposit-taking institutions is concentrated at relatively high levels of the ratio.

The fact that the leveraged loan and associated securitisation business is concentrated in the United States and, within Europe, in the United Kingdom, does not mean that the proliferation of these instruments poses no risk to the Spanish financial system. The risks assumed through leveraged loans in Europe and the United States affect global sensitivity to possible shocks to the review of the required risk premia or corporations' financial

position, and shocks originating in other systems may be passed through commercial and financial channels.

In addition, as shown in Chart F, as a proportion of total credit exposure to non-financial corporations, Spanish banks are not less exposed to syndicated loans than their European peers.

Lastly, Spanish deposit-taking institutions' exposure to leverage at large corporations is analysed, beyond the syndicated loan segment which, despite being an important risk category, might not include all exposures to highly leveraged corporations. Since 2009, data matching by the Banco de España's Central Balance Sheet Data Office (CBSO) and its Central Credit Register (CCR) shows lower credit exposure to more highly leveraged corporations (see Chart H), even though they account for a considerable proportion of total credit to large corporations in 2018. Specifically, the proportion of credit to corporations with debt ratios of 0.6-0.9 and of over 0.9, respectively, fell from 51% and 28% in 2009 to 46% and 17% in 2018. Exposure to less leveraged corporations mitigates the risks to the stability of the system, although the distribution of leverage observed indicates that the ability to pay of some corporations in this segment could be sensitive to a deterioration in macro-financial conditions, were the risks identified in this FSR to materialise.

In the years preceding the 2007/2008 global financial crisis, the Spanish economy posted persistent and growing current account deficits which reached 9.6% of GDP in 2007 and were barely offset by the modest capital account surplus (see Chart A). This continued recourse to external finance drove the net debtor position of the Spanish economy up from 34.7% of GDP in 1999 to 80.2% of GDP in 2008,<sup>1</sup> a record high at that time and well above the levels of other large European economies (see Chart B).

As a result of the crisis the Spanish economy underwent an internal process of adjustment of its current account balance which has taken it into surplus since 2013. This net lending to the rest of the world and the GDP growth reduced (in absolute terms) the negative net international investment position (IIP) of the Spanish economy by around 21 pp from the high in 2014 to 77.1% of GDP in 2018. This level, however, continues to be high and constitutes a source of vulnerability for the Spanish economy in the event of sudden changes in financing conditions on the global financial markets. In this respect, some studies have attempted to identify risk thresholds in external liabilities which, if exceeded, would be indicators of an appreciable increase in the vulnerability of the economy to international market turbulence. The Banco de España's analysis puts this threshold for the Spanish economy at 70% of GDP, a figure which, however, must be interpreted with caution given the methodological difficulties entailed in the construction of indicators of this type.<sup>2</sup> Moreover, the towering external debt of the Spanish economy is not amenable to correction in the short term, especially if it is taken into account that in the last few quarters the current and capital account surpluses have decreased and will for the next few years foreseeably hold at more moderate levels than those seen between 2014 and 2017.

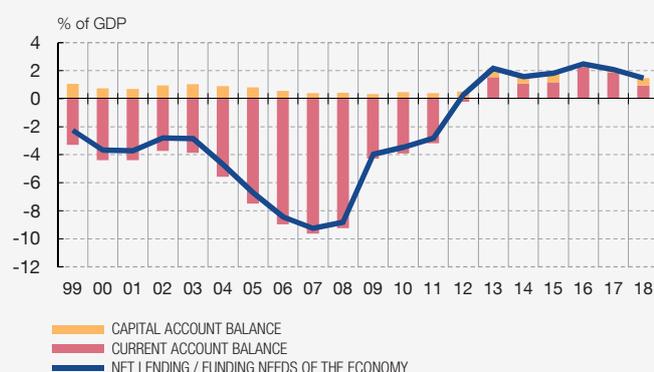
To better understand the risks derived from the high debtor position of the Spanish economy, it is useful to analyse also which financial products are used to incur these debts and which

resident institutional sectors are responsible for them. Chart C shows that the increase in the negative net IIP of Spain from 1999-2009 was due mainly to increased net liabilities in the portfolio investment and other investment categories. More specifically, in this period the Spanish economy financed its growing external imbalances mainly through portfolio investment in the form of debt instruments. As became clear upon the outbreak of the global financial crisis and the European sovereign debt crisis, the finance obtained through these instruments is particularly volatile (for example, in comparison with that raised in the form of direct investment) and liable to undergo sharp adjustments in response to changes in market sentiment. In this respect, it should be noted that the weight of these instruments in liabilities to the rest of the world has decreased in recent years from a high of 37% in 2006 to 28% in 2018.

Turning to the institutional sector, the breakdown in Chart D shows a marked change in the composition of the Spanish IIP. Thus, while in 2008 the resident private sector (i.e. other resident sectors and other monetary financial institutions) was responsible for 83% of Spain's negative net IIP, at present it only accounts for 19% of the total. By contrast, the weight of the public sector has increased notably from 22% in 2008 to 58% in 2018. Meanwhile, the Banco de España has gone from a creditor position in 2008 to being responsible for 23% of the current debtor position. Since most of the net external liabilities of the economy fall on the public sector, it is vital to underpin the sustainability of the public finances in order to forestall sharp changes in market sentiment and the reversal of external financing flows.

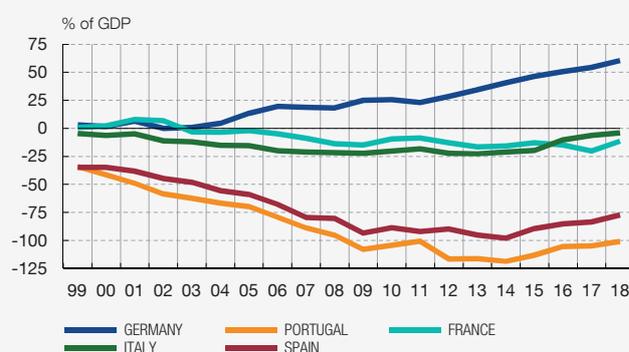
- 1 Changes in the IIP, in addition to being determined by the behaviour of the current account, also depend on valuation effects and other adjustments. In the period 1999-2008, these items made a negative contribution to IIP equivalent to 21 pp.
- 2 For more details, see Chapter 3 of the 2016 Annual Report of the Banco de España.

Chart A  
CURRENT AND CAPITAL ACCOUNT BALANCES



SOURCE: Banco de España.

Chart B  
NET IIP. INTERNACIONAL COMPARISON (a)



a The net IIP is the difference between the value of the external assets and liabilities of resident sectors vis-à-vis the rest of the world.

Chart C  
NET IIP. BREAKDOWN BY FUNCTIONAL CATEGORY (a)

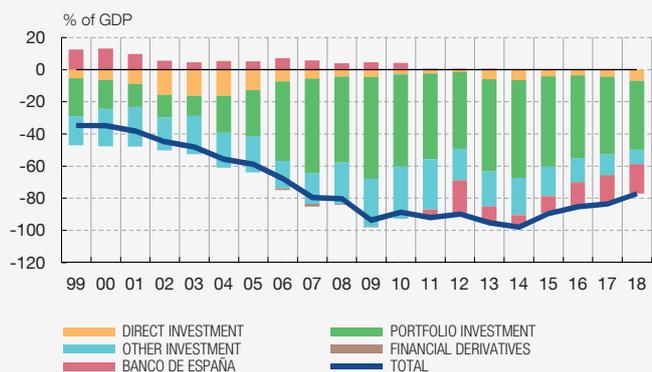


Chart D  
NET IIP. BREAKDOWN BY INSTITUTIONAL SECTOR (a)

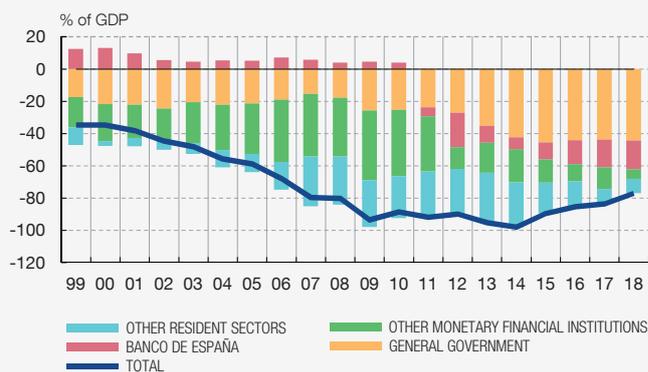


Chart E  
EXTERNAL DEBT. INTERNACIONAL COMPARISON (b)

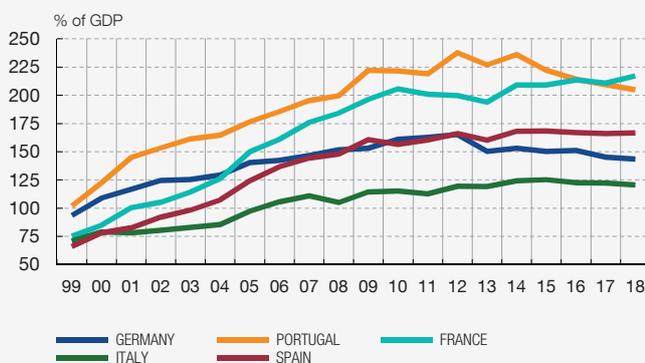
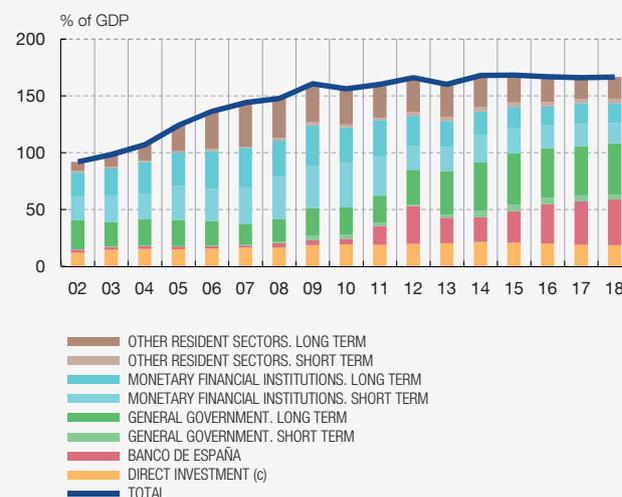


Chart F  
GROSS EXTERNAL DEBT STRUCTURE BY INSTITUTIONAL SECTOR AND MATURITY (b)



SOURCE: Banco de España.

- a The net IIP is the difference between the value of the external assets and liabilities of resident sectors vis-à-vis the rest of the world.  
 b The external debt comprises the balance of all liabilities giving rise to future payments of principal, interest or both (i.e. all financial instruments, except own funds, financial derivatives and monetary gold ingots).  
 c Including only direct investment in the form of debt.

Lastly, it is useful to supplement the information furnished by the IIP with that provided by gross external debt, an indicator which includes only the liabilities to the rest of the world that carry payment obligations.<sup>3</sup> In particular, this measure excludes all external liabilities in the form of holdings in capital, since these do not carry any future payment obligation and therefore do not pose the same risks to the sustainability and/or refinancing of external debt as other financing vehicles such as bonds or loans. Chart E shows that the gross external debt of the Spanish economy has barely shown signs of improvement in recent years, although it is in line with the euro area average. Since its peak in 2015, this indicator has only decreased by 2 pp to 166.7% of GDP in 2018. However, as regards its composition, there have been some changes in recent years which have helped to reduce its vulnerability. In particular, as shown by Chart F, the securities

issued by the public sector, which generally carry lower refinancing and liquidity risk than those issued by the private sector, have increased their weight in the total gross external debt from 14% in 2008 to 30% in 2018. The same goes for the external liabilities of the Banco de España, closely linked to monetary policy implementation, and for certain associated risks even more limited than those of the public sector, whose weight in the gross external debt increased by 22 pp in the same period. The weight of long-term instruments, which likewise usually carry lower refinancing risk, has also increased.

<sup>3</sup> External debt comprises all liabilities to non-residents that entail future repayment of principal, payment of interest or both. In practice, this includes all financial instruments except equity (shares and other equity, and investment fund units), financial derivatives and monetary gold ingots.

