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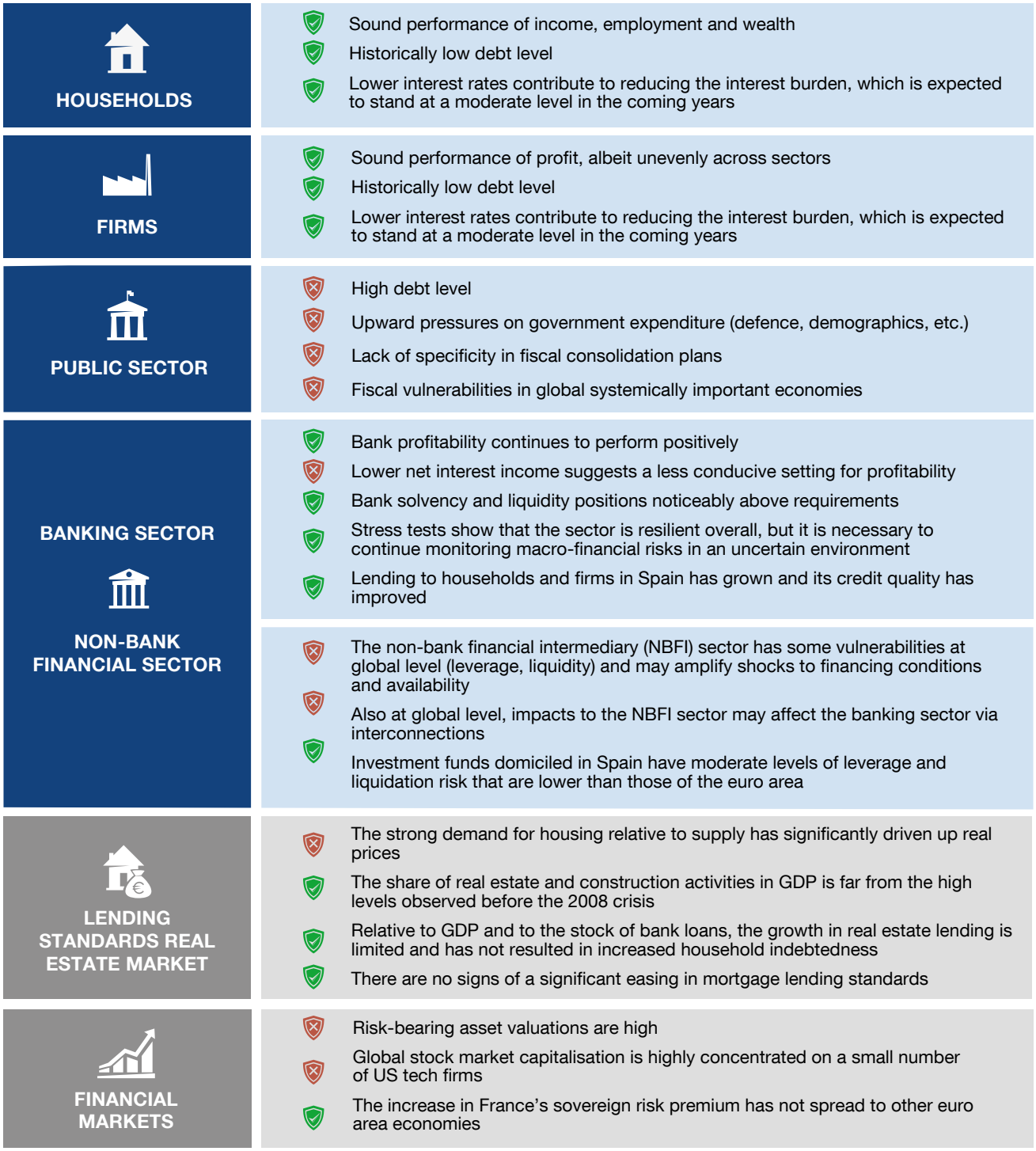
EXECUTIVE SUMMARY

Figure 1.1
Agents and markets relevant to financial stability (a)



SOURCE: Banco de España.

a The green (red) shields denote the circumstances of the financial position of each sector or market that constitute strengths (vulnerabilities) should risks materialise. The strengths (vulnerabilities) reduce (increase) the likelihood of occurrence or the impact of the risks to financial stability.

Since the Spring 2025 *Financial Stability Report* (FSR) was published, trade agreements between the United States and other countries have reduced some of the risks to financial stability. Nonetheless the global geopolitical and macro-financial environment remains marked by a high level of uncertainty. Similarly, amid high valuations, the risk of a sharp correction in global financial markets persists. Against this backdrop, the key sectors for the stability of the Spanish financial system have maintained a stable and broadly favourable financial position. However, vulnerabilities linked to high government debt remain.[1]

Households and firms

In Spain, household income and corporate earnings performed well in the first half of the year, although growth rates were somewhat lower than in 2024. This income growth helped keep debt ratios low by historical standards. It also contributed to a reduction in debt burden ratios, a trend also aided by lower reference interest rates, although to a lesser extent than in 2024. Debt and interest burden ratios are expected to stand at historically moderate levels in the coming years (see Sections 2.1 and 2.2).

Public sector

A favourable fiscal landscape will foreseeably lead to a further reduction in Spain's budget deficit in 2025, to close to 2.5% of GDP (down 0.7 percentage points (pp) on 2024). A somewhat smaller deficit of 2.3% is expected in the following two years. Even so, the government debt ratio will not decline significantly, holding at around 100% of GDP in 2027 (see Section 2.3).

This relatively high level of government debt – above the euro area average – remains a vulnerability for the Spanish economy, limiting the fiscal space to respond to potential adverse shocks. It also raises the sensitivity of government debt interest spending to changes in financial market conditions.

This is a particularly significant vulnerability given the high debt levels and budget deficits in global systemically important economies like the United States and France, with no clear prospect of curbing them. Any loss of confidence in their fiscal policy would likely push up these countries' debt financing costs, which – given their importance for the world economy – would have an adverse impact on other countries and could reduce the general willingness of global financial markets to assume sovereign risk.

Reducing government debt in Spain, as well as in the euro area as a whole, presents significant challenges. Debt developments are subject to upside risks linked to population ageing and spending demands related to the digital transformation, climate change and defence. Specific

1 In this report, vulnerabilities are defined as economic and financial conditions that increase the impact or probability of materialisation of risks to financial stability.

measures to control spending and/or increase revenue are therefore required. The Medium-Term Fiscal-Structural Plan presented by Spain in late 2024 lacks any such specifics. Further, the absence of State budgets limits the Government's ability to adopt more specific measures.

Banking sector

The Spanish banking sector's financial position improved further in 2025 H1. In particular, return on equity held at high levels, reaching 14.6%. Return on assets was likewise high. The earnings of the main listed banks remained robust in 2025 Q3.

In June 2025, net interest income – which had been the main driver of the sector's profitability – showed a year-on-year decline of around 10 basis points (bp) as a share of total assets. This drop owes to the tightening of net interest margins amid stabilising reference interest rates. That negative effect was more than offset by favourable developments in other items, such as net fee and commission income, impairment losses and other operating income.

However, part of the increase in profitability owes to temporary or one-off positive effects (e.g. the elimination of adjustments for hyperinflation in material economies) (see Section 3.1.1). Similarly, the slowdown in net interest income creates an environment less conducive to bank profitability growth.

Solvency increased in June 2025, with the common equity tier 1 (CET1) ratio[2] standing at 13.8%, 0.5 pp above its level 12 months earlier. This was due to the 5% rise in CET1 capital, which more than offset the growth in risk-weighted assets (see Section 3.1.2).

In 2025 H1 Spanish banks' CET1 ratio remained below that of other major European Union (EU) banking systems, although the gap narrowed year-on-year. The difference versus the European average is smaller in terms of the voluntary CET1 buffer,[3] while Spanish banks' leverage ratio[4] is comparable to that of euro area banks.

Further stress test exercises have been conducted since the publication of the last FSR, both EU-wide tests coordinated by the EBA and the Banco de España's own stress testing. According to the results, the Spanish banking sector's capital position provides a considerable level of aggregate resilience in the face of various adverse scenarios. In any event, ongoing monitoring of the significant risks to the banking system is required amid high levels of uncertainty.

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2 The CET1 ratio is defined as CET1 capital (the highest quality of regulatory capital) divided by risk-weighted assets. Assets with lower associated financial risks (e.g. government debt) receive a lower weighting in the calculation of the denominator – the logic being that lower-risk assets are less likely to incur unexpected losses that need to be absorbed by available capital.

3 The voluntary buffer is the difference between the CET1 ratio and the sum of the prudential supervisory CET1 requirement and the Pillar 2 Guidance.

4 The leverage ratio is defined as Tier 1 capital (CET1 capital plus additional Tier 1 capital) divided by on and off-balance sheet assets (not risk weighted).

Spanish banks' consolidated assets grew by 4.1% year-on-year in 2025 H1, up from 3.3% in December 2024, with significant momentum in domestic business (see Section 3.1.3). Lending to households and non-financial corporations resident in Spain grew by 3.1% and 2.1%, respectively, in the 12 months to June 2025 (see Section 3.1.4). This confirms the recovery of some dynamism in bank lending against a backdrop of lower interest rates.

The credit quality of loans to the Spanish private sector continued to improve in the first half of the year. In June 2025 the non-performing loan (NPL)[5] ratio stood at 2.9% and the stage 2[6] ratio at 5.7%, down 0.4 pp and 1.3 pp, respectively, on a year earlier (see Section 3.1.4).

The decrease in reference interest rates translated into a lower average cost of consolidated liabilities (2.7% in June 2025). Spanish banks' liquidity and net stable funding ratios held at secure levels, comfortably above minimum requirements (see Section 3.1.5).

Non-bank financial sector

Spain's non-bank financial intermediary (NBFI) sector[7] continued to grow in 2025 H1, although its size relative to the banking sector remains well below that of the broader euro area (see Section 3.2). The analysis of investment fund outflows and leverage and liquidity ratios indicates a lower level of risk in Spain than in the euro area overall. However, the liquidity ratios for the two geographical areas are below the average for the period 2018 Q1-2025 Q2.

In line with previous FSRs, no significant risks were detected in the domestic NBFI sector. However, this sector could be adversely affected by any abrupt and severe correction in the valuations of risky financial assets (see Section 4.2), which could potentially trigger the liquidation of assets. This risk is higher for intermediaries with high leverage and low liquidity, as is the case at the international level for various open-ended investment funds and hedge funds. However, such intermediaries have a minor market share in Spain and the euro area.

Given their international diversification, Spanish banks have direct interconnections with the NBFI sector in different geographical areas, although these represent a limited fraction of total assets (see Section 3.3).

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5 Non-performing loans are those for which there is a significant probability of default by the debtor, either because they are more than 90 days past due on a principal or interest repayment or because there is reasonable doubt regarding their ability to meet their obligations, even if they have not fallen due.

6 Those loans which are not "non-performing", but which show signs of impairment in the debtor's financial position or in the loan's credit quality are classified as stage 2 loans.

7 The NBFI sector includes money market funds, non-monetary investment funds, insurance companies, pension funds and other NBFIs. In turn, the latter subcategory includes specialised lending institutions, venture capital firms, securities dealers, financial vehicle corporations, central counterparty clearing houses, real estate investment trusts, securities agencies, collective investment institution management companies, mutual guarantee societies, financial group head offices, appraisal companies, payment institutions, holding companies, special-purpose entities that issue securities and other specialised financial institutions.

Real estate market

House purchase prices and volumes have continued to grow strongly in 2025 so far, although they have slowed in recent months. These developments reflect the strength of demand, driven by factors such as population growth and the tourism boom. In the case of prices, relatively rigid supply has also played a role (see Section 4.1.1).

Nearly 90% of the 375,000 property transactions in 2025 H1 involved second-hand homes. New housing production remains low by historical standards and the construction sector's share of economic activity is smaller than in previous growth periods, particularly compared to the pre-2008 real estate bubble. There is, therefore, no evidence of systemic vulnerability linked to excessive construction activity. Indeed, limited housing production has contributed to upward price pressures.

In real terms, house prices in June 2025 were at the same level as in 2005 Q2 and 17.5% below their peak in 2007. Since 2024 Q3, real house price growth has outpaced the rise in average real income per household. Current house prices stand above long-term estimates based on the historical relationship between prices, household income and interest rates. However, these estimates remain well below the highs recorded in early 2008.

Developments in real house prices have varied significantly across provinces since the pandemic. Provinces with higher price levels have seen stronger price growth, while those with moderate or low prices have seen only modest or no increases. Unlike the widespread price rises during the 2000s property boom, there has been no country-wide increase in prices.

The buoyancy of the housing market has come alongside growth in real estate loans, with notable increases in new mortgage business. The stock of loans for house purchase, property development and construction rose moderately (see Section 4.1.2). In any case, lending conditions for new mortgages show no significant signs of loosening, with only very limited increases in the loan-to-value and loan-to-income ratios. Likewise, there are no signs of excess in the ratio of real estate loans to either GDP or to total bank lending to the Spanish private sector (see Section 4.1.2). All this is consistent with the previously noted favourable financial position of the household sector.

Overall, there are significantly fewer vulnerabilities in the real estate market than in the years before the real estate crisis. The current rise in prices comes against a backdrop of historically weak construction activity, low household debt, moderate levels of housing loans and lending standards that show no significant signs of loosening.

Financial markets

Since the publication of the Spring 2025 FSR, monetary policy in both the euro area and the United States has eased moderately. Market expectations point to further policy rate cuts in the United States and smaller reductions, in the euro area. Against this backdrop, interest rates in euro area money markets have moved only to a limited extent.

The episode of turbulence in April was quickly left behind and financial markets have since performed strongly (see Section 4.2.). The depreciation of the US dollar against other currencies, such as the euro, has slowed and international investment flows to the United States have normalised.

Despite fiscal vulnerabilities identified in various countries, there have been no notable signs of stress in sovereign debt markets as at the cut-off date for this FSR. In particular, long-term sovereign debt yields have fallen in most euro area countries and, in particular, in the United States.

The sovereign spread on French government debt has widened, reflecting the increased political uncertainty in France. Its implied rating, as based on credit default swap (CDS)[8] market prices, also indicates that investors' outlook is more pessimistic than that of the rating agencies. Nevertheless, the cost of funding for the French state remains moderate.

In general, the high valuations of risky financial assets from a historical perspective is still a key vulnerability, amid a low level of market volatility and persistent uncertainty over global economic policies and outlook.

Corporate bond risk premia have fallen and remain low by historical standards, especially in the high yield segment. In equity markets, valuations are high, especially in the United States, linked to the boom in the technology sector, where market capitalisation is becoming increasingly concentrated.

Crypto-asset capitalisation rebounded strongly until early October, but it experienced significant partial corrections in that month. These assets still represent a small share of financial markets, but they are expected to expand and become increasingly interconnected with the traditional financial sector.

Risks

Geopolitical tensions continue to pose notable risks to financial stability,[9] linked to both uncertainty over international economic relations and ongoing military conflicts (see Section 5.1).

Agreements reached between the United States and other countries – and in particular with the EU –, have helped reduce uncertainty surrounding trade policy. Globally, the recent provisional trade agreement between China and the United States has been important in easing tensions.

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8 CDSs are a financial derivative that acts as coverage against default risk.

9 Risks are identified in this report as adverse changes (and with an uncertain probability) in economic and financial conditions or in the physical or geopolitical environment that hamper or impede financial intermediation and have negative consequences for real economic activity.

Despite these positive developments, uncertainty still clouds the future of international economic relations. It will take time to properly assess the economic consequences of the agreements already reached. In addition, the implications of non-tariff aspects (e.g. European investment in the United States and purchases of US energy and arms under the agreement) are difficult to quantify.

Beyond trade, a great deal of uncertainty surrounds US economic policy. In particular, pressure on independent government agencies may foster the build-up of medium and long-term vulnerabilities, with global repercussions.

The global economic impact of the major military conflicts that have broken out since 2022 (the Russia-Ukraine war and conflicts in the Middle East) has been significant, but limited so far, which has contributed to a widespread reduced perception of this risk. However, there remains the potential for rapid military escalation, which could sharply reverse expectations and potentially lead to major upheaval in financial markets and economic activity.

The risk of abrupt and severe corrections in international financial market valuations – already identified in the Spring 2025 FSR – continues to warrant attention. This risk is deemed to be high because, despite the complex geopolitical environment and global fiscal vulnerabilities, risky financial asset valuations remain high (see Section 5.2). If such corrections occur, they could affect various market segments, including equities and sovereign and corporate debt.

The concentration of market capitalisation in large US technology firms creates additional risks by increasing the likelihood that idiosyncratic shocks to their business could have systemic effects. Moreover, these firms are trading at particularly high valuations based on expectations of significant profit growth, which may not materialise if risks associated with technological progress and competition – such as in artificial intelligence – are realised.

Other macroeconomic risks for Spain appear relatively limited (see Section 5.3). Nevertheless, the fiscal vulnerabilities identified broaden the scope of shocks, even if limited in scale, that can shake confidence in fiscal sustainability. This consideration also applies to other countries with significant government indebtedness.

In the technological sphere, cyber risk management continues to grow in importance, driven in no small part by geopolitical tensions and the possibility of hybrid attacks (see Section 5.4).[10] Over the medium and long term, emerging risks are also envisaged in connection with the expansion of crypto-assets and their growing interconnectedness with the traditional financial sector.

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10 Hybrid attacks combine various approaches (cyber attacks, propaganda, political interference, etc.) in an attempt to exploit weaknesses in critical infrastructure, undermine social cohesion and erode trust in institutions. Typically, an attacker will seek to maintain plausible deniability for their actions.

Macroprudential policy

The macroprudential policy of the Banco de España (see Chapter 6) remains focused on strengthening the banking sector's releasable capital. Accordingly, the countercyclical capital buffer (CCyB) requirement set by the Banco de España was raised at the beginning of 2025 Q4 to 1%, 0.5 pp higher than 12 months earlier. This increase will only be applicable from 1 October 2026. The CCyB requirement has thus been brought into line with the intermediate level of cyclical systemic risk currently observed in Spain.

The list of other systemically important institutions (O-SIIs)[11] for 2026 remains unchanged from the previous year, comprising Banco Santander, BBVA, CaixaBank and Banco Sabadell. The O-SII capital buffer has been cut by 25 bp for BBVA (in line with a reduction in indicators of its systemic importance), but is unchanged for the other three banks (see Section 6.2).

The Banco de España continues to monitor lending standards closely and is strengthening its analytical framework to guide decisions, when applicable, regarding the implementation of macroprudential limits on lending standards, i.e. borrower-based measures (BBMs). As such, Chapter 6 includes a review of the scientific literature on the international precedents in the use of BBMs (see Box 6.1).

The cut-off date for this FSR is 29 October 2025.

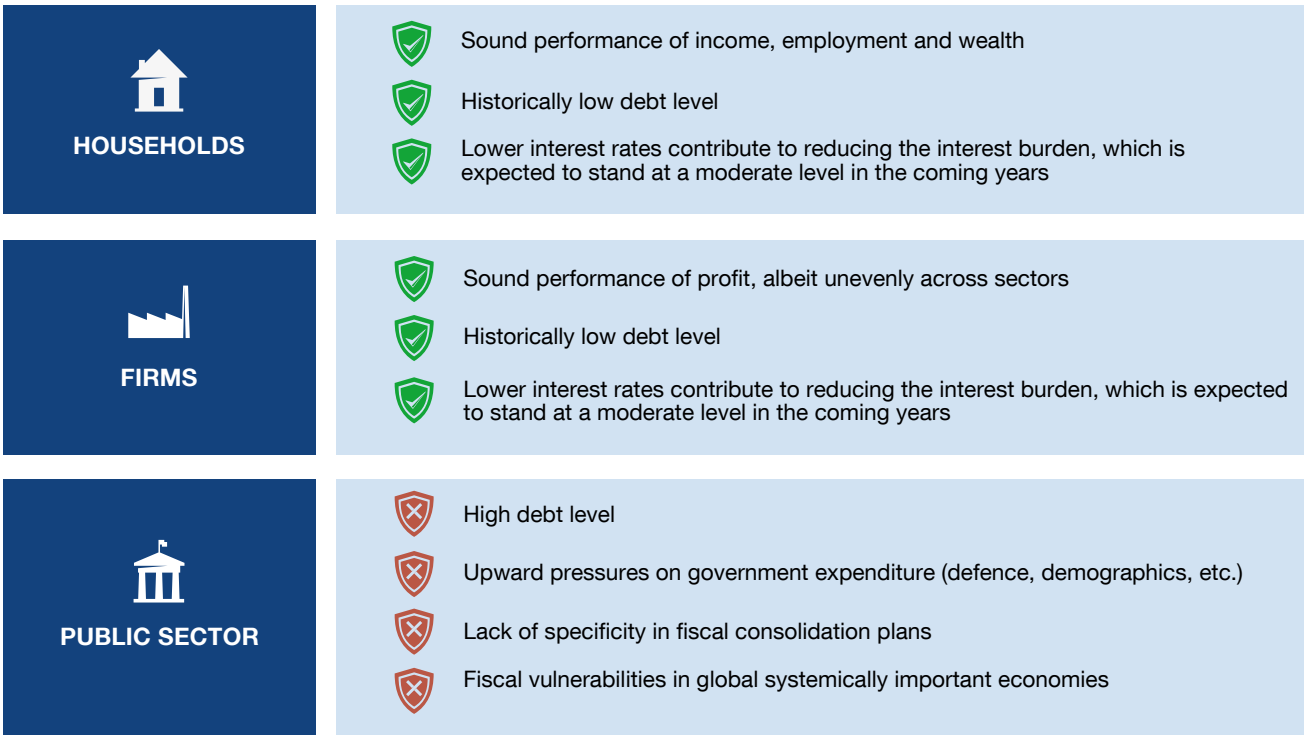
11 O-SIIs are designated based on their systemic importance to the Spanish economy. Their proper functioning is essential for the entire financial system to operate effectively and not hinder economic activity. Banco Santander is also designated a global systemically important institution. In this instance, its systemic importance is significant for the global economy rather than just the national economy.

2

FINANCIAL SITUATION OF HOUSEHOLDS, NON-FINANCIAL CORPORATIONS AND GENERAL GOVERNMENT

2 FINANCIAL SITUATION OF HOUSEHOLDS, NON-FINANCIAL CORPORATIONS AND GENERAL GOVERNMENT[1]

Figure 2.1
Financial situation of households, firms and general government (a)



SOURCE: Banco de España.

a The green (red) shields denote the circumstances of the financial position of each sector that constitute strengths (vulnerabilities) should risks materialise. The strengths (vulnerabilities) reduce (increase) the likelihood of occurrence and/or the impact of the risks to financial stability.

2.1 Households

Household income continued to increase in 2025 H1. The average year-on-year growth of household income[2] in the first six months of the year was 5.9%, 0.6 percentage points (pp) less than in 2024 H2 (Chart A2.2.1.1 in Annex 2). Real income per household[3] also grew at a slower pace (2.4% year-on-year, 0.7 pp less than in 2024 H2), standing 4% above the pre-pandemic level (average in 2019). The increase in income fed through to consumption more

1 It should be noted that the values of some variables used in this Chapter of the report may differ from those presented in previous reports, as they are periodically revised. Specifically, the entities responsible for preparing the Quarterly Non-Financial Accounts for the Institutional Sectors (the National Statistics Institute), the financial accounts and the balance of payments and international investment position (the Banco de España) and the General Government Accounts (the National Audit Office) periodically review the data in a coordinated fashion. The data from 2022 Q1 were reviewed in September 2025.

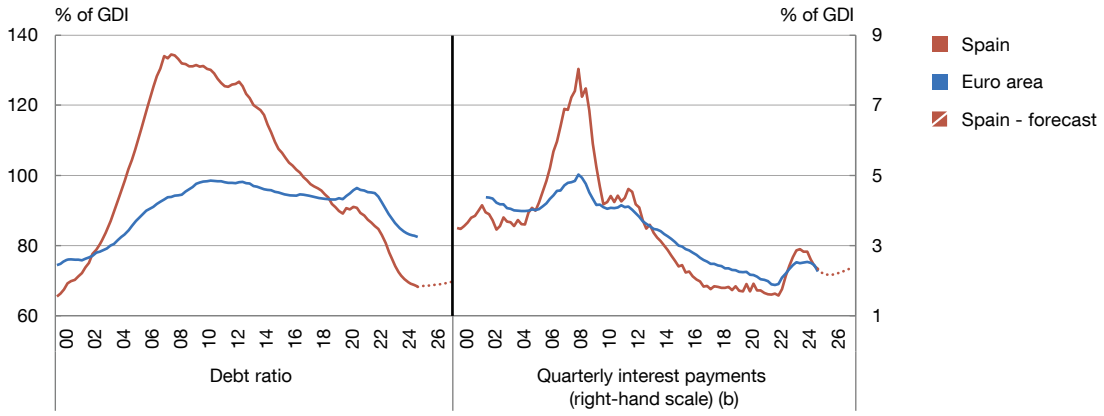
2 Household income is measured using gross disposable income (GDI) in the National Accounts. This aggregate includes compensation of employees, gross operating surplus (GOS), gross mixed income, property income and net taxes paid.

3 Real income is calculated by applying the private consumption deflator to the nominal values. The year-on-year increase in the number of households was 1% in 2025 H1.

Chart 2.1

Spanish households' debt and interest burden ratios continued to decline and are expected to stand at moderate levels in the coming years

2.1.a Households' debt ratio and interest burden as a percentage of GDI (a)



SOURCES: ECB, Eurostat, INE and Banco de España. Latest observation: 2025 Q2.

a Seasonally adjusted data. The future paths of the ratios for Spain are estimated based on the projected GDI, interest rates and lending volumes included in the Banco de España's 2025 Q3 macroeconomic projections.
b Quarterly flow of interest effectively paid by households (i.e. the value of financial services implicitly received by households when they take out loans is not excluded) as a percentage of quarterly GDI.

DOWNLOAD

than to savings. Thus, although the household saving rate decreased in 2025 H1 by 0.3 pp compared with 2024 H2, it remained at historically high levels (12.6%) (Chart A2.2.1.2 in Annex 2).

The household debt-to-income ratio decreased somewhat. It stood at 68.3% in 2025 Q2, 2.4 pp less than a year earlier, and at a level not seen since 2000. It is also lower than that observed in the euro area (82.5%) (Chart 2.1).[4] The decline in the ratio was driven by income growth, which more than offset the increase in lending to households. The ratio is expected to rise only marginally over the next few years, to close to 70% at end-2027.

The interest burden declined slightly in 2025 H1, influenced by lower interest payments and higher nominal income. In 2025 Q2 the interest burden stood at 2.3% (Chart 2.1), the same level observed in the euro area and below the historical average (3.5%). It is expected to drop to 2.2% in 2026 Q1 and to reach 2.4% in 2027 Q4. These developments could favour households' consumption and therefore contribute to improving their well-being, as shown in Box 2.1, which analyses the relationship between indebtedness and consumption.

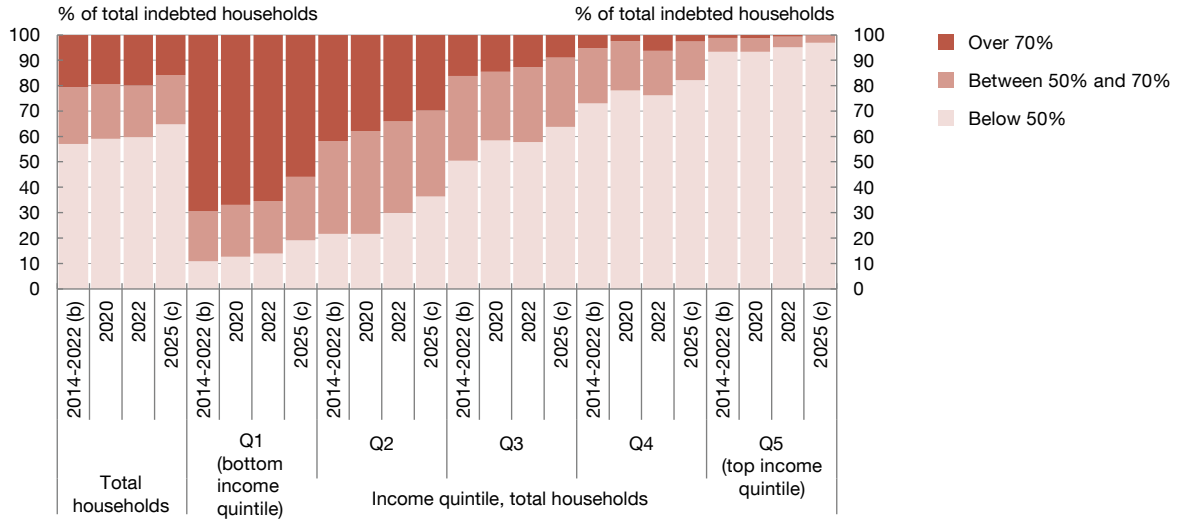
By the end of this year the proportion of indebted households with high expense burdens relative to their income is expected to decrease compared with 2022. In particular, it is estimated that the proportion of indebted households that spend a large part

4 Households' outstanding debt is seasonally adjusted.

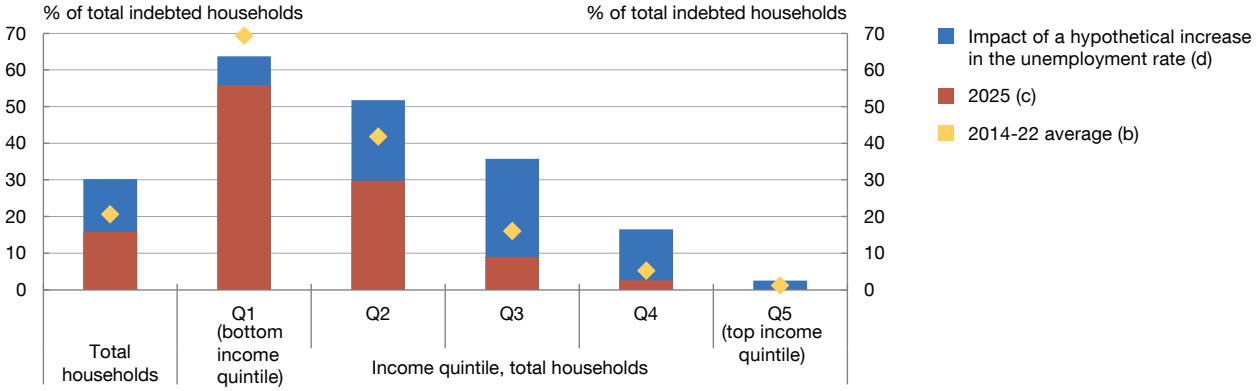
Chart 2.2

It is estimated that the percentage of indebted households with high expense burdens relative to their income has declined up to 2025 and that there is some sensitivity to significant changes in unemployment

2.2.a Indebted households based on range of the essential expenses-to-gross income ratio, by income quintile (a)



2.2.b Percentage of indebted households whose essential expenses exceed 70% of their income, in the event of a hypothetical increase in the unemployment rate by one standard deviation from its historical average (a)



SOURCE: Banco de España. Latest observation: 2022.

a It is assumed that indebted households in 2025 are the same as in 2022. Essentials include debt servicing, food, and utility bills and rental of the main residence.
b Average percentages in the period.
c Note A2.2.1.3 in Annex 2.
d Results obtained from 100 alternative simulations with an increase in the unemployment rate by income quintile consistent with that included in the 2022 EFF (the latest observed) plus one standard deviation from the historical average. The standard deviation is calculated, for the total population and for each separate quintile, based on the unemployment rate observed in the years in which the EFF was conducted (2002, 2005, 2008, 2011, 2014, 2017 and 2022). This increase (of 4.6 pp for all households) is a significant, albeit not extreme, change in the unemployment rate (which is distributed, in most cases, across a range of a few standard deviations from the mean).

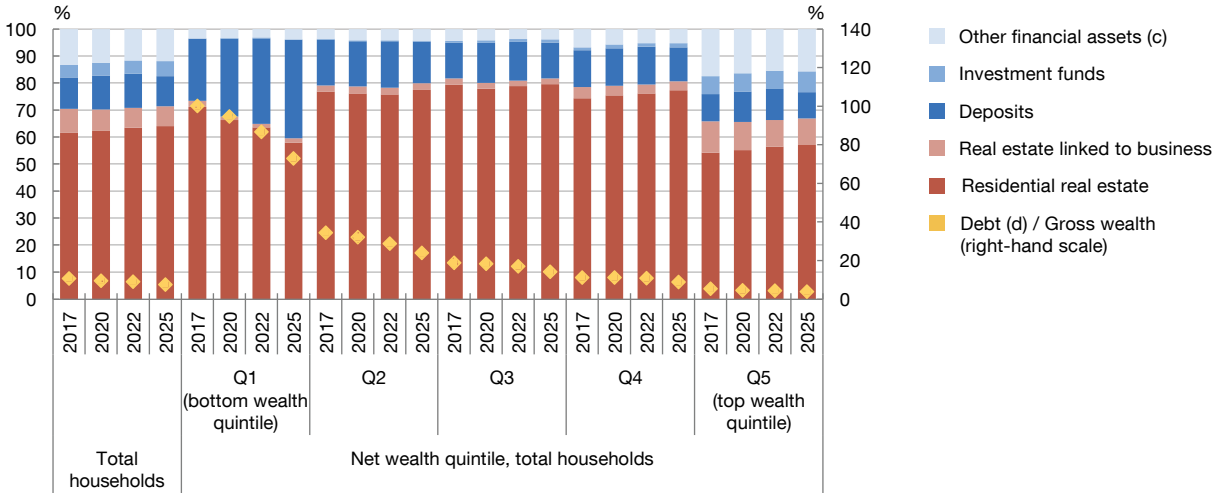
(over 70%) of their income on essentials will stand at 15.8% at end-2025, 4.1 pp less than in 2022 and nearly 5 pp below the 2014-22 average.[5] Low-income indebted households will see the largest drop relative to 2022 (9.5 pp) (Chart 2.2.a).

5 Estimated drawing on the latest Spanish Survey of Household Finances (EFF) 2022 and the assumptions described in note A2.2.1.3 in Annex 2. Essentials include debt servicing, food and utility bills and rental of the main residence. According to this survey, the proportion of indebted households is 57%. By income bracket, this percentage was 42% for the lowest-income quintile, 50% for the second lowest, 60% for the third, 65% for the fourth and 69% for the fifth.

Chart 2.3

Households' debt-to-gross wealth ratio decreased in 2025, in parallel to the increase in the share of residential real estate assets and investment funds in their total assets

2.3.a Distribution of household assets, by net wealth quintile (a) (b)



SOURCES: ECB and Banco de España. Latest observation: 2025 Q1.

a Households' distributional wealth accounts (DWA). Includes around 85% of financial wealth (cash, debts pending collection, pension plans and other insurance are not included in this statistic) and 95% of households' real estate wealth according to the financial accounts. The data for 2017, 2020 and 2022 correspond to year-end, while those for 2025 correspond to end-2025 Q1.
b In 2025 Q1 the first quintile (20% of households with the lowest net wealth) concentrated 0.2% of total net wealth; the second, third and fourth quintiles concentrated 4%, 9% and 18% of total net wealth, respectively; and the last quintile concentrated 69% of total net wealth.
c Includes bonds, shares and life insurance.
d Includes only loans (does not include sole proprietors' trade debt).

This proportion of indebted households that must allocate a large portion of their income to essentials would show some sensitivity to significant changes in unemployment. Chart 2.2.b presents the results of a sensitivity exercise in response to a hypothetical increase of 4.6 pp in the unemployment rate, calibrated in line with its historical variability.[6] The results suggest that the percentage of indebted households spending a large portion of their income on essentials would increase by 14.4 pp, with a larger increase expected among middle-income households. The increase is smaller among lower-income and higher-income households. The latter tend to have other sources of income aside from employment. Income decreases less among low-income households than among middle-income households thanks to safety net mechanisms that ensure a minimum income. Although middle-income households also benefit from these mechanisms, their previous labour income was higher and, accordingly, the relative loss in income when they become unemployed is more significant for them.

Real household wealth grew by 8.3% year-on-year in 2025 Q2. This increase was mainly driven by real estate and (to a lesser extent) financial asset revaluation (Chart A2.2.1.4 in

6 An increase of one standard deviation is applied. This is calculated, for the total population and for each separate quintile, based on the unemployment rate observed in the years in which the EFF was conducted (2002, 2005, 2008, 2011, 2014, 2017 and 2022), excluding 2020. This increase is a significant, albeit not extreme, change in the unemployment rate (which is mostly distributed across a range of a few standard deviations from the This increase (of 4.6 pp for all households) is a significant, albeit not extreme, change in the unemployment rate (which is distributed, in most cases, across a range of a few standard deviations from the mean).

Annex 2). Although house price appreciation boosts homeowner wealth, it limits access to housing for potential new buyers (Chart A2.2.1.5 in Annex 2). The composition of household assets in 2025 Q1, compared with 2022, shows an increase in the share of residential real estate assets and investment funds and a decrease in the share of deposits. This change in the composition at aggregate level is shaped by the households in the top 20% of the net wealth distribution, which concentrate around 70% of wealth. By contrast, the share of deposits increased among lower-net wealth households (Chart 2.3).

Households' debt-to-gross wealth ratio decreased across the board. Thus, it stood at 7.4% for total households in 2025 Q1 (-1.5 pp compared with 2022), with an especially sharp reduction among lower-net wealth households, for which the ratio declined by 13.8 pp, to 72.8% (Chart 2.3).

2.2 Non-financial corporations

Gross operating profit (GOP) grew in 2025 H1, albeit somewhat unevenly across sectors. In June firms' nominal GOP[7] had risen by 5.9% year-on-year. Profit grew in the construction and real estate sector and, particularly, in the trade and other services[8] sectors. Conversely, the industry (excluding refined petroleum products), hospitality and energy sectors recorded decreasing profits (Chart A2.2.2.1 in Annex 2).

The most recent data from the Banco de España's Business Activity Survey (EBAE) point to moderately expansionary business activity in the second half of the year. Firms' turnover, in seasonally adjusted terms, increased slightly in 2025 Q3 and the outlook for Q4 is positive.[9] In any event, firms remain concerned about economic policy uncertainty and labour shortages, although the percentage of firms affected by factors related to rising financial costs has continued to decline.

Despite a slight increase, the debt ratio remains at historically low levels, similar to those of the euro area. The debt-to-GOS ratio rose by 0.2 pp from end-2024, to 310% (Chart 2.4).[10] This is similar to the figure for the euro area (312%) and, from a historical perspective for Spain, stands at levels not seen since 2000. Meanwhile, Spanish firms' debt-

7 GOP (which is similar to GOS, used in the National Accounts) is profit obtained from firms' ordinary business activity, after payments to suppliers and other operating expenses and remuneration of labour. If positive, it can be used to pay tax, fund investments or remunerate shareholders and financial creditors. GOP data are obtained from combined data of the Spanish tax authorities (AEAT) and the Central Balance Sheet Data Office Quarterly Survey (CBQ).

8 Including transportation and storage, information and communication, professional, scientific and technical activities and administrative and support service activities.

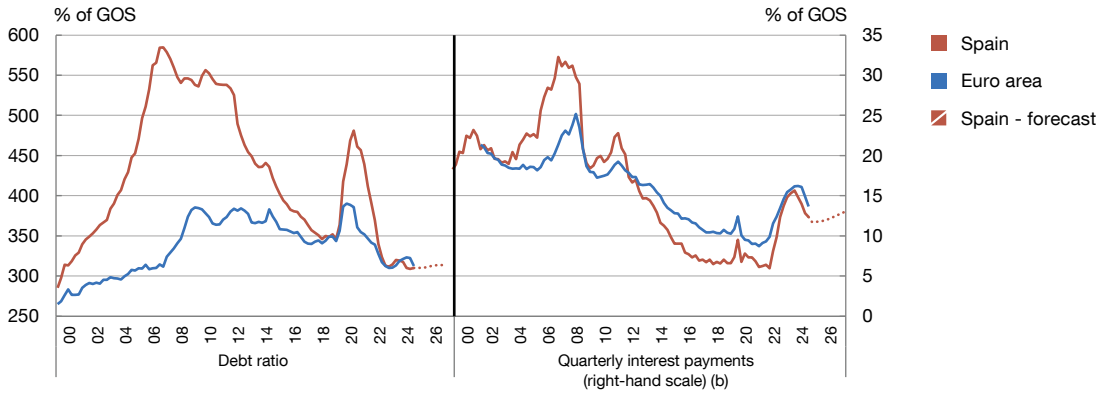
9 Alejandro Fernández Cerezo and Mario Izquierdo. (2025). "The Banco de España Business Activity Survey: 2025 Q3". *Economic Bulletin - Banco de España*, 2025/Q3.

10 In the National Accounts, GOS (similar to GOP) is a corporate profit measure defined as value added (the difference between the value of the goods and services produced and the goods and services consumed) at factor cost, less personnel costs. It is the balance available to firms to reward their shareholders and financial creditors, to pay taxes and, potentially, to finance all or part of their investment. GOS is used to construct the ratios in this section owing to its greater historical depth.

Chart 2.4

Spanish firms' debt and interest burden ratios stand at moderate levels, which are expected to persist in the coming years

2.4.a Firms' debt ratio and interest burden as a percentage of GOS (a)



SOURCES: ECB, Eurostat, INE and Banco de España. Latest observation: 2025 Q2.

a Seasonally adjusted data. The future paths of the ratios for Spain are estimated based on the projected GOS, interest rates and lending volumes included in the Banco de España's 2025 Q3 macroeconomic projections.
b Quarterly flow of interest effectively paid by firms (i.e. the value of financial services implicitly received by firms when they take out loans is not excluded) as a percentage of quarterly GOS.

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to-GDP ratio amounted to 62.5% in June 2025, below the figure for the euro area (66.6%). The projections point to a slight increase in debt levels until end-2026.

The ratio of interest payments to GOS continued on its downward trend in 2025. Despite the slight increase in debt, interest payments declined between April and June for the fourth consecutive quarter, due to the progressive pass-through of the recent monetary easing cycle. Their share in GOS stood at 12.3%, 3 pp below their peak of the last ten years (15.7%), recorded in June 2024 (Chart 2.4). The interest burden remained below both that of the euro area (13.7%) and the historical average since 2000 (16.4%). The projections suggest that this ratio will stop decreasing at end-2025 and pick up slightly in 2026 and 2027.

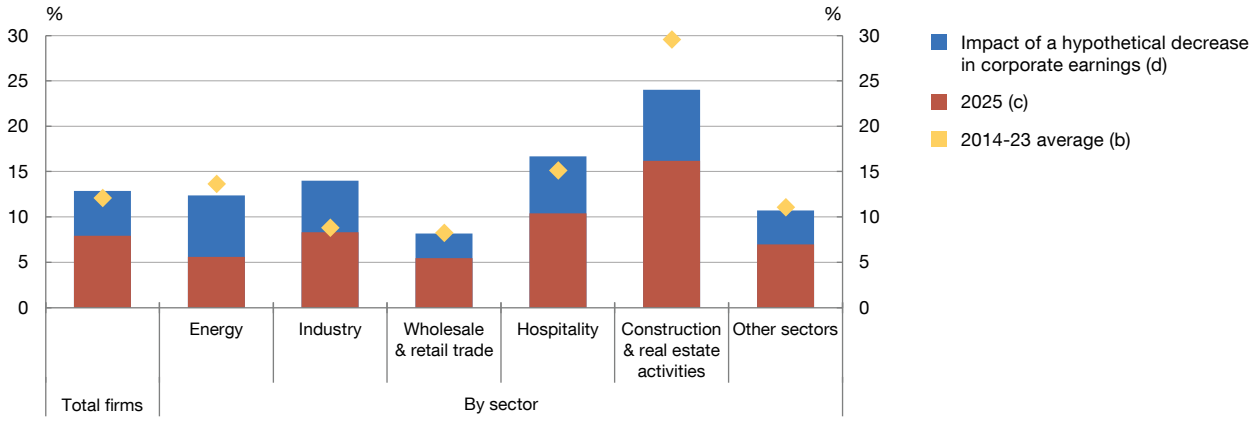
According to estimates based on granular firm-level data, the decline in the debt burden in 2025 was widespread across sectors of activity.[11] This indicator, calculated only for firms with financial debt, decreased across all sectors of activity and the value that it will foreseeably reach at end-2025 will be well below the average for the period 2014-23 (excluding 2020), except in the industry sector, where the two values will be very similar (Chart 2.5).

11 The debt burden ratio is defined as financial costs / gross operating profit + financial revenue. The source for calculating the ratio is the Integrated Central Balance Sheet Database (CBI by its Spanish initials) and the last year for which there are complete CBI data is 2023. Changes in the GOS are estimated based on the variation observed by sector in the AEAT data (or CBQ data for sectors not available in the AEAT) between 2023 and 2025. Financial costs are approximated under the assumption that the decline in the 3-month EURIBOR between 2023 and 2025 is passed through in full to the average cost of debt and that debt variations in each sector mirror those derived from the bank credit information available in the Central Credit Register.

Chart 2.5

In general, firms improved their ability to cover their financial costs in 2025. However, some sectoral heterogeneity may emerge in the event of a significant drop in profits

2.5.a Indebted firms' debt burden in the event of a hypothetical decrease in corporate earnings by one standard deviation from its historical average (a)



SOURCE: Banco de España. Latest observation: 2023.

a The debt burden is defined as financial costs / (gross operating profit + financial revenue). Excluding firms without financial debt.
b Excluding 2020.
c Note A2.2.2.2 in Annex 2.
d Data estimated assuming that the GOP estimated for 2025 declines by the equivalent of one standard deviation of the median GOP (at NACE Rev. 2 division level) for 2002 to 2023, excluding 2020.

In the event of a hypothetical significant decrease in profits, the impact on the debt burden ratio would be heterogeneous across sectors of activity. Starting from the situation in 2025, a sensitivity exercise in response to a hypothetical fall in ordinary profit was conducted, calibrated based on its historical variability,[12] which would entail a 42% GOP fall for the sample of indebted firms as a whole. The results reveal an increase in the debt burden of almost 5 pp, which would be sharper in the construction and real estate, energy and hospitality sectors. Despite this increase, the debt burden would remain at levels similar to the average for the period 2014-23, except in industry, where it would be somewhat higher, evidencing a greater potential vulnerability to a fall in profits.

2.3 General government

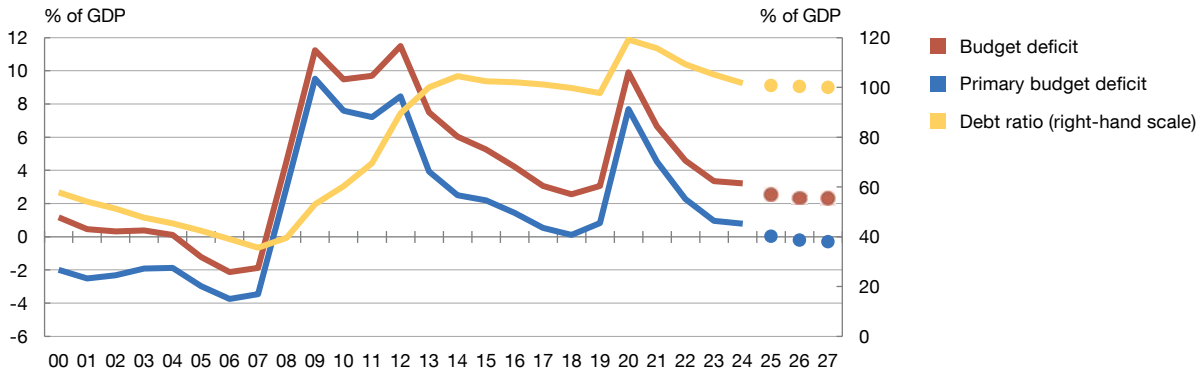
Recent developments in government revenue and expenditure could lead to further progress in the correction of general government deficit in Spain. The notable growth of government revenue in recent months would more than offset the likewise expansionary behaviour of expenditure. Overall, as reflected in the Banco de España's September projections,

12 A decline equal to one standard deviation of the median GOP (at NACE Rev. 2 division level) is estimated for 2002 to 2023, excluding 2020. This decrease is a significant, albeit not extreme, change in the GOP (which is mostly distributed across a range of a few standard deviations from the average).

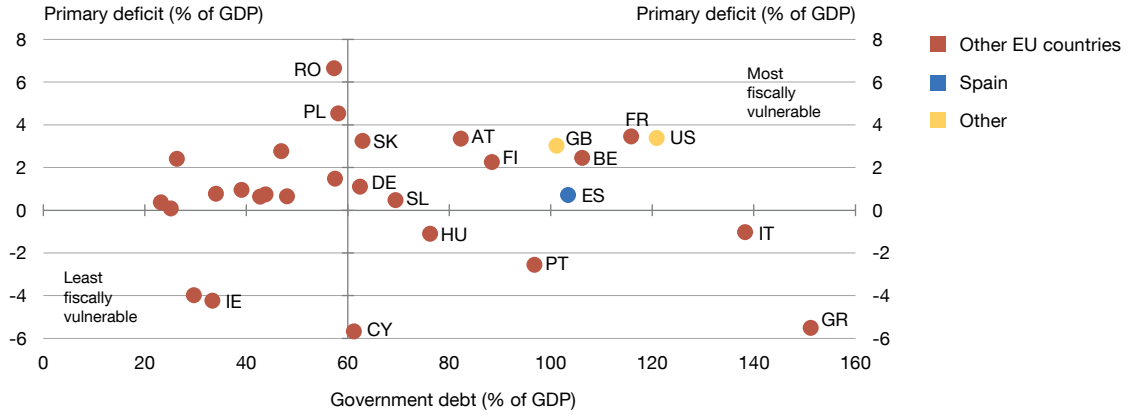
Chart 2.6

Spain remains among the group of countries with larger fiscal vulnerabilities, although progress has been made in recent years

2.6.a General government financial position in Spain (a)



2.6.b International comparison (2025 Q2)



SOURCES: Datastream, Eurostat, Intervención General de la Administración del Estado (IGAE) and Banco de España.

a The dots denote the Banco de España's projections published on 16 September.

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at year-end the budget deficit could stand at around 2.5% of GDP, below the Government's 2.8% target. This improvement is expected to continue over the next two years, when a deficit of 2.3% of GDP is anticipated, with minor primary surpluses for the first time since 2007 (Chart 2.6.a).

However, the government debt ratio is likely to remain high, both from a historical standpoint and in the European context. After decreasing by 3.5 pp of GDP in 2024, it is expected to further decline by 0.9 pp in 2025 and 0.7 pp between 2026 and 2027, to stand at around 100% of GDP in 2027, according to the Banco de España's projections (Chart 2.6.a). This level would still be substantially higher (by around 10 pp) than that projected by the ECB for the euro area as a whole. This slower pace of government debt reduction, despite the slight primary surpluses, would be due to a more moderate nominal GDP growth compared with the strong growth recorded between 2021 and 2025.

For its part, the average cost of new financing for the Treasury is currently below 2023 and 2024 levels. In recent months, the average cost of financing for the Treasury remained at around 2.7%, below the 3.1% and 3.4% recorded in 2024 and 2023, respectively, yet above the current average cost of the total outstanding government debt (2.3%).

For the coming years, the markets anticipate a slight increase in the cost of new financing, which would lead to a moderate rise in the general government financial burden. This burden would stand at 2.6% of GDP in 2027, according to the baseline scenario in the Banco de España's projections, compared with 2.4% in 2024.

The high public debt level in Spain makes the country vulnerable to a potential abrupt deterioration in market financing conditions. The average term to maturity of government debt is relatively long (7.7 years, in the case of securities issued by the central government), which would mitigate the short-term impact, but would not eliminate it if the hypothetical tightening of financing conditions were sufficiently sharp. By way of illustration, in a scenario of short, medium and long-term interest rates 1 pp higher from 2026 than those considered in the projection exercise, in 2027 the general government debt burden ratio would stand 0.3 pp above the level projected under the baseline scenario (2.9% vis-à-vis 2.6%).

The vulnerability which the high government indebtedness entails for financial stability is augmented by growing spending needs. The Spanish government will have to address the challenges posed by demographic ageing, geopolitical tensions, the digital transformation and climate change. These issues will require greater government spending, further widening the public finances shortfall if no compensatory measures are taken.

For the time being, the measures that would enable compliance with the Medium-Term Fiscal Structural Plan (MTP), bringing the future path of government debt back to more sustainable levels, have yet to be specified. The MTP submitted by Spain at end-2024 lacks sufficient and specific measures underpinning the net spending commitments undertaken. Also, the absence of a central governmen budget limits the authorities' room for manoeuvre.[13]

On the international front, some systemically important countries show certain vulnerabilities in their fiscal position and others that are in a better position envisage increasing their indebtedness. The former include most notably France, the United States and the United Kingdom. All of them have high government debt levels and sizeable imbalances in their public finances (Chart 2.6.b). Government indebtedness is not high in Germany, but current plans involve a significant fiscal expansion over the coming years.

The recent US tax reform will reduce the medium-term sustainability of government debt. The tax package approved on 1 July (the One Big Beautiful Bill Act of 2025) extends

13 See for instance, the Report on Monitoring of 2025-2028 Medium-Term Structural Fiscal Plan published by the Independent Authority for Fiscal Responsibility (AIRef) in May 2025.

many of the tax cuts deployed during the first Trump Administration in 2017 that were set to expire at end-2025. It also includes additional deductions that are to be partially offset by adjustments to public spending. According to Congressional Budget Office (CBO) estimates, this package will lead to a substantial increase in the budget deficit and the national debt in the medium term.[14] This deterioration of public finances would be somewhat offset by the rise in tariff revenues, whose magnitude is uncertain,[15] as it depends on the tariffs that will ultimately be adopted and their impact on trade flows and economic activity.

14 According to the CBO estimates, the annual budget deficit would increase on average by around 0.9 pp of GDP between 2025 and 2034, standing at around 7% of GDP. As a result, government debt would reach 127% of GDP at the end of that period (29 pp more than in 2024 and 10 pp above the scenario without the tax reform).

15 In August 2025 the CBO estimated that tariff revenues would reduce the primary budget deficit over the period 2025-35 by a total of $3.3 trillion, compounded by a saving of $0.7 trillion in interest outlays. On average, these figures would account for around 1% of annual GDP during that period (the CBO's March 2025 long-term GDP projections were used for this estimate).

Box 2.1

FINANCIAL BURDEN ASSOCIATED WITH THE MAIN RESIDENCE AND HOUSEHOLD CONSUMPTION

Access to credit by households may support their consumption, enhancing their level of well-being. However, the effects of household leveraging may turn negative if said level is unsustainable or if the associated debt burden is excessive. For example, the literature points out that although access to sustainable mortgages to finance the main residence may incentivise consumption, high debt burden levels are, however, associated with greater household vulnerability and lower consumption in the face of a worsening economic situation.[1]

This box provides a quantitative approximation to the impact of household indebtedness on private consumption. Specifically, it examines the relationship between the financial effort associated with Spanish households' main residence costs and their consumption expenditure. To this end, the available data from the latest waves of the Spanish Survey of Household Finances for the period 2002-22 are used.[2]

According to the more recent waves of this survey, over 60% of aggregate spending in consumption is concentrated in households with outstanding debt (Chart 1). These households' share in consumption rose from 56.1% in 2011 to 62.5% in 2022.[3] In this group approximately one-half of this expenditure corresponds to households whose main residence is mortgaged, a share that has remained relatively steady throughout the period analysed. Although the proportion of total consumption of households living in rented housing (with or without debt) is relatively low, it has increased notably, from 8.9% in 2014 to 15.6% in 2022.

An analysis follows of whether consumer spending has behaved homogeneously among households depending on their debt burden[4] and income[5] levels. Specifically, the average rates of change in real consumption per household between 2002 and 2022 (Chart 2), broken down by income tercile and by whether or not it has debt, is calculated. In the first group (households with outstanding debt) the average change in real consumption is negative for the first two income terciles, while those in the upper tercile show zero average growth. In turn, households with no debt burden show a slight upward trend or stability in their real consumption. This difference is especially marked among lower-income households, where the absence of debt translates into greater spending capacity and a more stable consumption in the face of potential economic shocks. However, as the Chart shows, there is significant dispersion regarding average growth within each group, especially among households with outstanding debt.

Additional regression exercises, aimed at explaining changes in consumption based on debt burden level for households with similar socio-economic and demographic characteristics, confirm the existence of a significant inverse correlation between debt burden and consumption.[6] This analysis is carried out for the sub-set of households with outstanding mortgage loans on their main residence. The relationship between the broader concept of financial burden and consumption for households with no debt living in rented housing was also analysed.[7,8]

---

1 See, for instance, Box 1.1 in the Banco de España Annual Report 2014; José María Casado, Marc Folch and Roberto García-Coria (2015), "Evolución y determinantes del consumo de la UEM durante la crisis", *Boletín Económico – Banco de España,* 10/2014, pp. 81–91; Scott R. Baker (2018), "Debt and the Response to Household Income Shocks: Validation and Application of Linked Financial Account Data", *Journal of Political Economy,* Volume 126, Number 4, pp. 1504–1557, doi: https://doi.org/10.1086/698106; Andreas Fagereng and Elin Halvorsen (2016), "Debt and household consumption responses", Working Paper – SSRN, doi: https://doi.org/10.2139/ssrn.2942502; Ying Fan and Abdullah Yavas (2020), "How Does Mortgage Debt Affect Household Consumption? Micro Evidence from China", *Real Estate Economics,* Volume 48, Issue 1, pp. 43–88, doi: https://doi.org/10.1111/1540-6229.12244; Rutger Teulings, Bram Wouterse and Kan Ji (2023), "Disentangling the effect of household debt on consumption", *Empirical Economics,* Volume 65, pp. 2213–2239, doi: https://doi.org/10.1007/s00181-023-02428-4; Hector Sala and Pedro Trivín (2024), "Household finances, debt overhang and consumption patterns", *Economic Modelling,* Volume 139, 106836, doi: https://doi.org/10.1016/j.econmod.2024.106836.

2 The latest observation available relates to 2022, when the recovery in consumption following the pandemic was still incomplete. Since then, it is estimated that the recovery by age group and by income level has been uneven (Martínez-Carrascal, 2025).

3 Between 2002 and 2022, the share of indebted households living in rented housing rose by 8 percentage points (pp), while that of households with a mortgage on their main residence did so by 6 pp. By contrast, the percentage of homeowners without debts decreased by 14 pp during the same period. The share of other household groups in the total households remained stable over the period under review.

4 The debt burden is the ratio of payments for all outstanding mortgage and non-mortgage debt (including principal and interest repayments) to gross household income.

5 This exercise is conducted for all households, regardless of their debt type and main residence tenure status.

6 We follow the methodological approach used in Philip Du Caju, Guillaume Périlleux, François Rycx and Ilan Tojerow (2023), "A bigger house at the cost of an empty stomach? The effect of households' indebtedness on their consumption: micro-evidence using Belgian HFCS data", *Review of Economics of the Household,* Volume 21, pp. 291-333, doi: https://doi.org/10.1007/s11150-022-09605-x.

7 Accordingly, the analysis does not cover households with other types of debt, such as mortgages on second homes or non-mortgage debt.

8 For those who rent their main residence, the financial burden is defined as rental burden, i.e. the ratio of main residence rental payments to gross household income. For those with a mortgage on their main residence, the debt-to-income ratio would be equal to the debt burden (see footnote 4).

Chart 1
Distribution of consumption expenditure based on indebtedness and main residence tenure status (a)

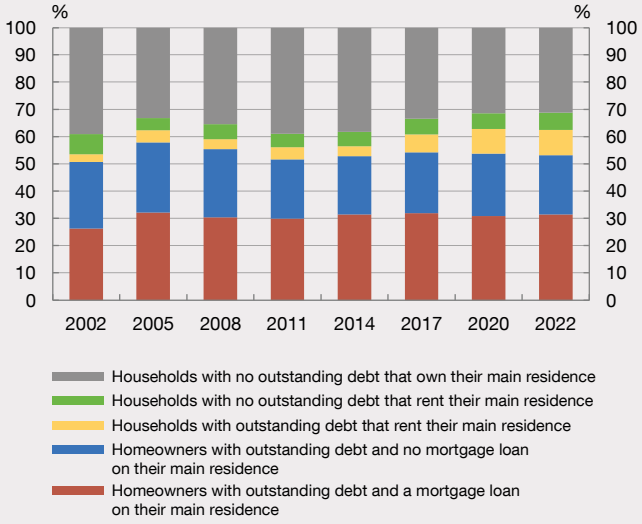


Chart 2
Average growth of consumption expenditure per household. Breakdown by income tercile and indebtedness (a) (b)

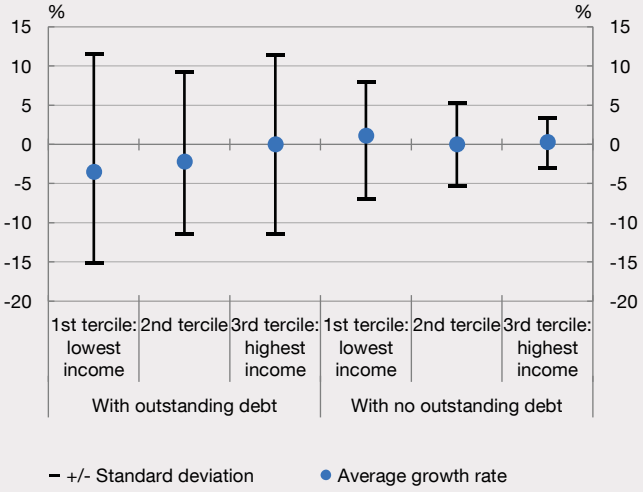


Chart 3
Differences in consumption of households with a mortgage or that rent (c)

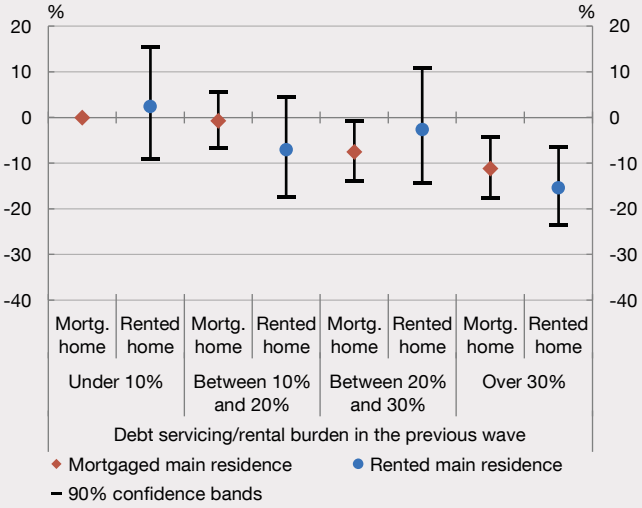
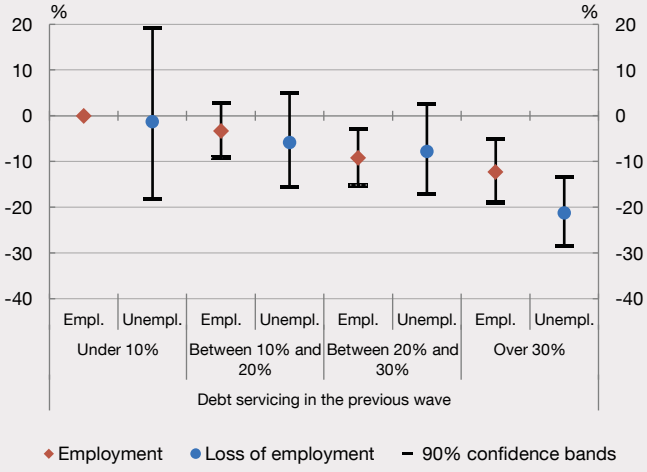


Chart 4
Differences in consumption of indebted households in the face of changes in the reference person's employment status (d)



SOURCE: Banco de España, Spanish Survey of Household Finances.

a All types of goods and services consumption are considered, including spending on food, other non-durable goods (including utilities), vehicles and household equipment acquired in the last year.

b Average consumption growth is calculated as the average rates of change in consumption per household, in real terms, of the survey waves compared with the previous wave, for each income tercile (calculated based on the total household distribution). The upper (lower) bar accompanying each point in the chart is obtained by adding (subtracting) the standard deviation to (from) the corresponding average rate.

c The consumption variable is modelled (in logarithms) through different binary variables relating to the debt/rent service-to-income ratio, controlling for level of income, wealth and debt (in logarithms) and for other demographic and economic factors (such as sex, age, household type and size, income and wealth percentile, employment status and phase of the economic cycle). For households with an outstanding mortgage on their main residence, debt service is defined as the ratio of payments for all outstanding mortgage or non-mortgage debt (including principal repayment and interest payment) to gross household income. For households with no debt that rent their main residence, the rental burden is defined as the ratio of rental payments to gross household income. The information on both household indebtedness and rental burden was drawn from the previous wave of the survey to reduce potential endogeneity problems. The percentage effect on the baseline category for each of the binary variables mentioned is shown, with a 90% standard error confidence interval (bars). As the dependent variable in the regression is defined in logarithms, the percentage effect (and the standard error intervals) on the consumption baseline category is given by the calculation $(e^{\beta}-1)\times 100$, where β represents the estimated coefficient for each binary variable. The baseline category (with a coefficient equal to 0) comprises households with an outstanding mortgage on their main residence that allocated between 0% and 10% of their income to debt servicing in the previous wave of the survey.

d The same type of specification and analysis used in Chart 3 is used here. The baseline category (with a coefficient equal to 0) comprises households with mortgages on their main residence that allocated between 0% and 10% of their income in the previous wave to debt servicing and whose reference person remained employed or self-employed between survey waves.

For household owners with an outstanding mortgage loan on their main residence, there is a negative correlation between consumption and the debt burden (Chart 3).[9] Specifically, consumption is 8% lower for households using between 20% and 30% of their income to pay debts than for households using less than 10%. This negative difference increases to 11% for households with similar characteristics dedicating more than 30% of their income to this end. These findings suggest that the negative correlation between consumption and indebtedness is greater in particular when the interest burden exceeds 30% of household income.

An inverse correlation is also observed between consumption and the financial burden for households that, despite having no debts, use a substantial portion of their income to pay rent for the house they reside in. In particular, households without debts that use more than 30% of their income to pay rent for their main residence consume 15% less than those with similar characteristics with a mortgage on their main residence and allocating less than 10% of their income to pay such debt. Nonetheless, consumption does not differ significantly among households without debts that allocate more than 30% of their income to pay rent and those with a mortgage that also allocate over 30% of their income to pay that debt. These results suggest that the weight of housing costs (whether through rental or mortgage payments) can have a significant effect on the level of household consumption, especially when it exceeds 30% of income.

Although the foregoing evidence suggests that the debt burden for households with outstanding mortgage loans on their main residence affects their consumption, this influence may differ depending on each household's economic situation. In the event of an adverse shock, such as job loss, the fall in consumption could be even more pronounced.

To explore this hypothesis, the analysis is broadened to consider changes in consumption when the main reference person becomes unemployed (Chart 4). The negative correlation between debt burden and consumption heightens in this scenario. A household that owns and has a mortgage on its main residence, whose reference person works and uses more than 30% of income to pay the outstanding debt, consumes 12% less than a household with similar characteristics whose debt service-to-rent ratio is below 10%. However, if the reference person becomes unemployed, consumption in the latter household drops by 21% compared with the former. Although the difference between the two consumption gaps is not statistically significant, it is considerable (9 pp). These findings point to employment status being the most determining factor for explaining the heterogeneity of consumption among similar households with different debt burden levels.

For owners of a main residence with a mortgage, a fall of 10% in non-durable and food consumption is estimated when the debt service-to-income ratio exceeds 30%. Also noteworthy is the 38% estimated fall in vehicle purchases for this same household group.[10]

As the previous analysis shows, an excessive debt burden tends to reduce spending on consumption, especially in adverse situations such as the loss of employment. This sensitivity of consumption to economic shocks may affect other agents, such as firms, which could experience fluctuations in demand for their products, with possible effects on their economic and financial position and, ultimately, on financial stability.

9 Although a correlation that does not entail causality is analysed, the information on both household indebtedness and rental burden was drawn from the previous wave of the survey to reduce potential endogeneity problems.

10 No statistically significant correlation is found in this exercise (although a high dispersion is) between the debt burden and spending on other durable goods (household equipment) for households with an outstanding mortgage on their main residence.

3

FINANCIAL POSITION OF SPANISH BANKS AND THE NON-BANK FINANCIAL SECTOR

Figure 3.1
Financial position of banks and the non-bank financial sector (a)

SOURCE: Banco de España.

a The green (red) shields denote the circumstances of the financial position of each sector that constitute strengths (vulnerabilities) should risks materialise. The strengths (vulnerabilities) reduce (increase) the likelihood of occurrence or the impact of the risks to financial stability.

3.1 Banking sector

3.1.1 Profitability

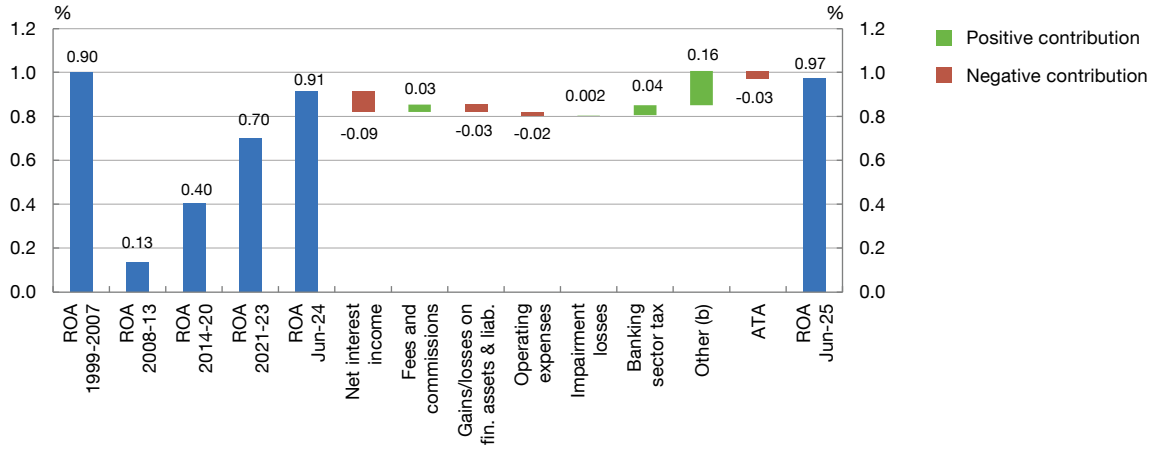
The profitability of the Spanish banking sector continued to improve in 2025 H1. The sector's consolidated profit was up 10% in the period January-June 2025 on the same months of 2024 (see Annex 1).[1] The return on assets (ROA) stood at 0.97%, compared with 0.91% in June 2024 (Chart 3.1). The return on equity (ROE) increased by 0.6 percentage points (pp) to 14.6% (Chart A2.3.1.1.1 in Annex 2). This improvement was seen across all

1 In 2025 H1 a significant credit institution announced the agreement to sell a subsidiary abroad. Thus, in accordance with International Financial Reporting Standard 5, it recorded the results of the business concerned under a single heading in its consolidated income statement ("Profit or loss from discontinued operations (net)"), therefore excluding them from the heading-by-heading breakdown of the continuing operations. In this section, to ensure consistency in the analysis and the year-on-year comparison with June 2024, these amounts have been reincorporated into the main income statement headings. This distribution of "Profit or loss from discontinued operations (net)" does not alter net profit and, therefore, neither ROA nor ROE.

Chart 3.1

Despite the fall in net interest income, the Spanish banking sector's ROA continued to improve in 2025 H1

3.1.a Breakdown of the change in ROA. Consolidated data (a)



SOURCES: Banco de España and public financial reports. Latest observation: June 2025.

a, b Note A2.3.1.1.3 in Annex 2.

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banks (Chart A2.3.1.1.2 in Annex 2). The main listed banks' earnings for Q3 show that bank profitability remains on an upward path.

The favourable performance of various income statement headings offset the decline in net interest income. The decrease in this component of profit (Chart 3.1) contrasts with its performance in prior quarters, when it was the main driver of profitability. Notable among the components that contributed to profitability growth are net fee and commission income, tax expenses and other operating income (the latter due largely to the smaller adjustment for hyperinflation in Argentina and Türkiye).[2] By contrast, impairment losses held steady. Meanwhile, the denominator – average total assets (ATA) – made a negative contribution to the change in ROA, after it rose by 3.8% in the period.

The components that have contributed to the year-on-year improvement in profitability in H1 are largely one-off in nature. This is true for the lower adjustments for hyperinflation. The lower taxes are due to accounting treatment, meaning that most of the positive effect on this component will foreseeably not last for the year as a whole.[3]

The fall in net interest income, the main driver of profitability since 2021, is explained by lower net interest margins, amid monetary policy easing. The effect of this decline in

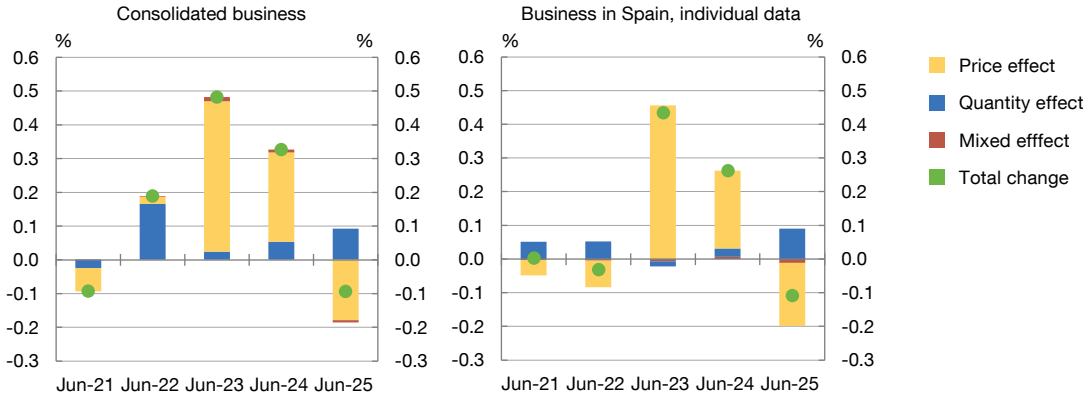
2 The hyperinflation adjustment affects the business abroad of the sector's two main banks. The international accounting standards applicable to Spanish banks effectively penalise the measurement of businesses whose functional currency is the currency of a hyperinflationary economy (see International Accounting Standard 29). Lower inflation in Türkiye and Argentina has reduced these penalties.

3 The previous temporary bank levy (established by Law 38/2022) accrued in full in 2024 Q1. However, the current tax on net interest income and fees and commissions (established by Law 7/2024) accrued in June only for the part corresponding to the first two quarters.

Chart 3.2

The fall in net interest income was due to the negative impact of monetary easing via prices (lower net interest margin) outweighing the positive impact via quantity (greater volume of business)

3.2.a Breakdown of the change in net interest income as a percentage of ATA (a)



SOURCES: Banco de España, Capital IQ and public financial reports. Latest observation: June 2025.

a Note A2.3.1.1.5 in Annex 2.

net interest margins[4] (with lending rates falling more than deposit rates) (Chart A2.3.1.1.4 in Annex 2) outweighed the impact of the increase in the volume of business (driven by the recovery in lending). This has reduced net interest income, at both consolidated level and in business in Spain (Chart 3.2).[5] This decline was seen across all banks (Chart A2.3.1.1.6 in Annex 2) and continued in the 2025 Q3 earning reports published by the main listed banks. The loss of momentum in net interest income, which was anticipated in the previous *Financial Stability Report* (FSR), suggests a less conducive setting for bank profitability growth in the coming quarters. However, as the pass-through of lower monetary policy rates to bank interest rates is completed, it is likely that its adverse impact on net interest income will tend to fade and that this component of profit will stabilise.

Since 2021 the improvement in the profitability of banks with the most international presence has arisen mainly in Spain and Mexico. In the other material countries, profitability has held relatively stable (Chart 3.3). The improvement in earnings in Mexico in recent years, in line with business in Spain, was due to the rise in net interest income. This momentum has started to peter out and both net interest income and earnings in Mexico fell year-on-year in June 2025. Nevertheless, in the first half of the year Mexico remained the top foreign contributor to these institutions' earnings (26% of total earnings, a figure below Spain's share of 39%), followed by Brazil (8%), the United States (6%), the United Kingdom (5%) and Türkiye (3%). The other business units contributed 13%. In this respect, Box 3.1 analyses the geographical

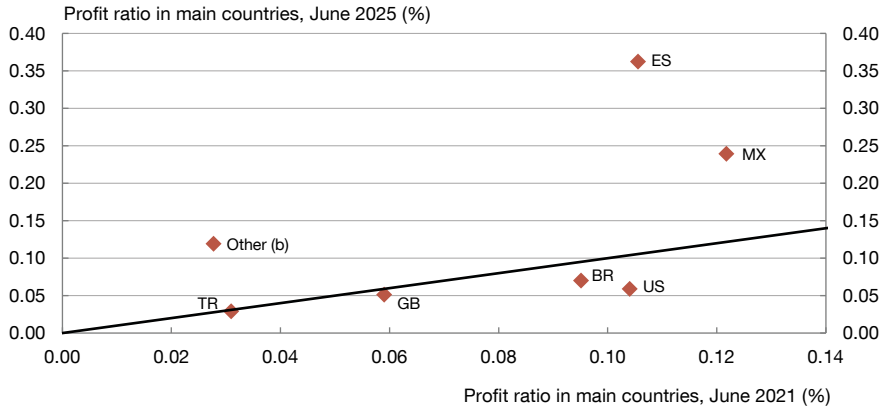
4 Net interest margin is defined as the difference between the average rate charged on asset positions and the average rate paid on liability positions.

5 In this vein, the recent *Bank Lending Survey for 2025 Q3* shows that, for the coming six months, respondent banks expect that policy interest rate decisions will prompt a further - albeit more moderate - decline in profitability as a result of narrower net interest margins, and despite the positive impact on the volume of credit extended.

Chart 3.3

By geographical area, the improvements in bank profitability have mainly arisen in recent years in Spain and Mexico

3.3.a Profit ratio in the main countries in June 2025 and June 2021 (a). Consolidated data



SOURCES: Banks' public financial reports. Latest observation: June 2025.

a The ratio of annualised ordinary profit attributable to the parent in each country to consolidated average total assets, multiplied by 100. It is calculated for the three banks with the most significant international presence.
b "Other" includes, in addition to earnings in the other countries, the earnings of the banks' corporate centres.

and sectoral distribution of Spanish banks' lending abroad, finding that their exposure is fairly diversified against the economic impact of the new tariffs implemented in 2025, which is itself limited.

In 2025 H1 the profitability of the Spanish banking sector outperformed that of the other major banking systems in the European Union (EU). On European Banking Authority (EBA) data at June 2025, the main Spanish banks' ROA amounted to 1%, 25 basis points (bp) above the European average of 0.75% and higher than the figures for other major European countries, except Italy[6] (Chart A2.3.1.1.7 in Annex 2).

3.1.2 Solvency

The Common Equity Tier 1 (CET1) capital ratio stood at 13.8% in June 2025, up 0.5 pp year-on-year. The increase was due to year-on-year growth of over 5% in CET1 capital, which outweighed the negative contribution from the 1.4% increase in risk-weighted assets (RWAs) (Chart 3.4.a, left-hand panel). RWAs rose because total assets (see Section 3.1.3) grew more than the decrease in their risk profile, measured by RWA density.[7] The increase in the CET1

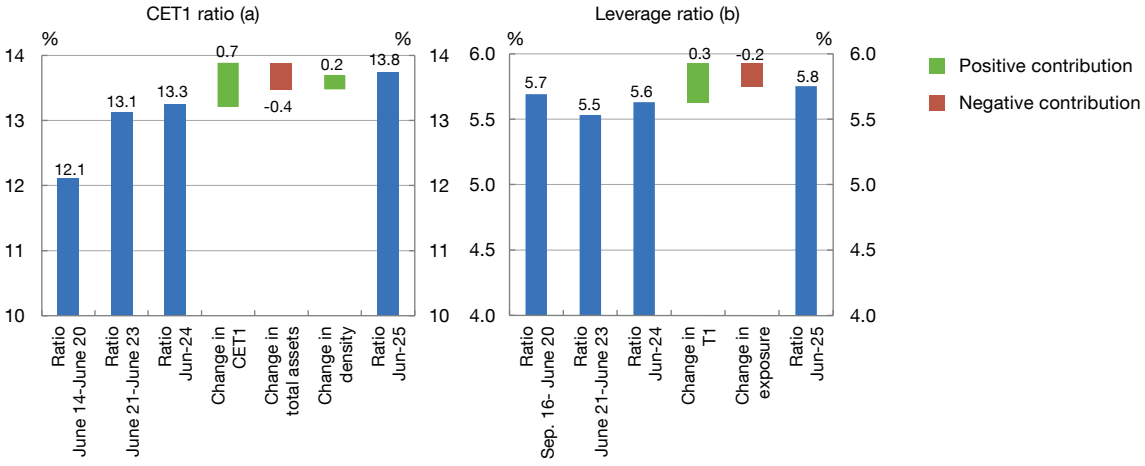
6 Spain's ROA in this European comparison differs from that in the first paragraph, due to differences in the scope of institutions considered. To compare European figures, EBA data are used. These data refer to the major EU banks, which, in the case of Spain, are limited to the ten significant institutions. The remainder of this section uses national data for the set of banks.

7 The change in the CET1 capital ratio can be broken down into the contribution of CET1 capital (the numerator) and RWAs (the denominator). The contribution of the latter can, in turn, be broken down into the contribution of total assets and RWA density. RWA density is the ratio between RWAs and total assets, with higher values indicating a higher risk profile.

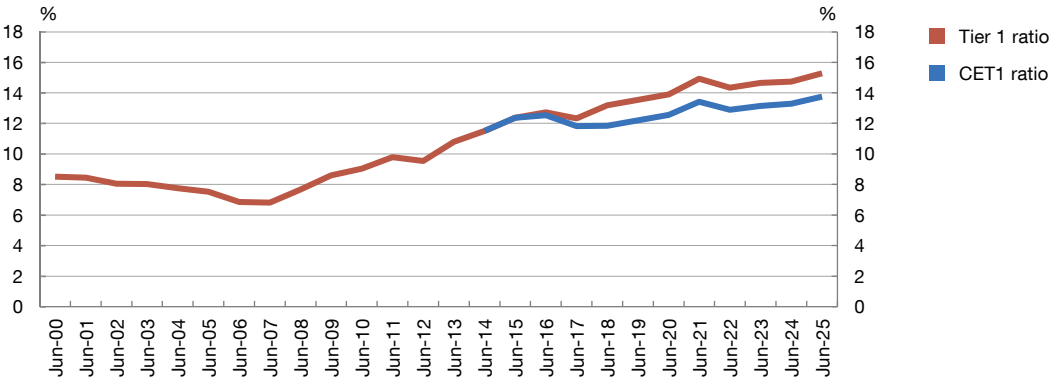
Chart 3.4

The Spanish banking system's CET1 and leverage ratios grew year-on-year to June 2025, driven by the accumulation of capital

3.4.a Breakdown of the change in the CET1 and leverage ratios. Consolidated data



3.4.b Change in the Tier 1 and CET1 ratios over time (c) (d)



SOURCE: Banco de España. Latest observation: June 2025.

a, b, c, d Note A2.3.1.2.1 in Annex 2.

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ratio was seen across all banks (Chart A2.3.1.2.2 in Annex 2). Over a broader time horizon, capital ratios have risen considerably since 2007 (Chart 3.4.b).

The Spanish banking system's leverage ratio rose in 2025 H1. In June 2025 the leverage ratio stood at 5.8%, a year-on-year rise of 12 bp (Chart 3.4.a, right-hand panel).[8] The forces behind these developments (greater increase in capital than in assets) are analogous to those mentioned for the CET1 ratio. The improvement in the leverage ratio was relatively widespread across all banks (Chart A2.3.1.2.3 in Annex 2).

8 The leverage ratio is calculated by dividing Tier 1 capital by total exposure, which includes on and off-balance-sheet exposures and is not risk-weighted.

Spanish banks' CET1 ratio remains below the EU average, although this gap has narrowed slightly. In the 12 months to June 2025, this gap narrowed by 0.2 pp, from 3.3 pp in June 2024 to 3.1 pp (Chart A2.3.1.2.4 in Annex 2).

The Spanish banking sector's voluntary CET1 buffer is also lower than that of other European banks, but the difference is smaller than in the case of the CET1 ratio. For the latest period available, Spain's voluntary buffer is 1.7 pp lower than the EU average.[9] The smaller difference compared with the CET1 ratio reflects the Spanish banking system's lower capital requirements, in line with its risk profile.

Spanish banks' leverage ratio remained at a level comparable to that of the other European banking sectors. In June 2025 it stood barely 0.3 pp below the European average (Chart A2.3.1.2.4 in Annex 2), a difference that remained steady between June 2024 and June 2025. The smaller leverage ratio gap between the Spanish banking sector and its European peers is mainly due to Spanish banks having a higher RWA density (RWAs account for a higher percentage of total assets), which contributes to lowering the CET1 ratio, but does not impact the leverage ratio.[10]

The latest stress-tests show that Spanish banks' capital affords them a considerable level of resilience. The results of the EBA's EU-wide stress test published in August this year and of the stress tests conducted by the Banco de España using its own analytical tools suggest that the Spanish banking sector would have an appropriate CET1 ratio level in the face of different adverse scenarios (see Box 3.2). The hypothetical environments examined include shocks of different kinds, specifically in terms of their persistence over time and their effects on inflation and on financial and real estate asset prices, reinforcing the robustness of the conclusions.

3.1.3 Consolidated balance sheet

Assets

Spanish banks' consolidated assets remained on their recent upward path in 2025 H1, particularly financial assets with counterparties in Spain. Between December 2024 and June 2025, total assets rose by 1.4%, resulting in a year-on-year rate of 4.1% (see Annex 1). Financial assets with counterparties in Spain grew by 3.4% in 2025 H1, while financial assets

9 This figure is for December 2024, the latest figure reported by the EBA for voluntary capital buffers, and only considers the CET1 prudential requirements (Pillar 1, Pillar 2 requirements, combined buffer requirements and Pillar 2 guidance). The EBA sample contains 161 banks; the Spanish banks in the sample are the ten significant institutions.

10 Among the factors explaining Spanish banks' higher RWA density is the lower use of internal ratings-based (IRB) models to calculate RWAs, which typically generate lower capital requirements than the standardised approach. IRB models use statistical techniques to estimate, using internal data on assets, unexpected losses and measure the loss-absorbing capacity of the capital held by banks. If a bank has not been authorised by the supervisor to use IRB models, it uses the standardised approach (applying standard and pre-established percentages to risk exposures).

with counterparties abroad decreased by 2.5% in the same period, amid the depreciation of different currencies against the euro.[11] Notable in the recent growth in financial assets with counterparties in Spain has been the increase in loans and debt securities. By contrast, claims on the Eurosystem decreased.

Liabilities

Spanish banks' consolidated liabilities grew in line with assets in 2025 H1.[12] Between December 2024 and June 2025, aggregate liabilities increased by 1.4%, slower than the growth observed in 2024 H2, placing year-on-year growth at 3.9% (see Annex 1). By nationality of the counterparty, the changes in liabilities were comparable to those in assets. By instrument type, the year-on-year growth of 1.6% in deposits from national counterparties contrasted with the contraction of 8.4% in those held by foreigners. Meanwhile, equity grew year-on-year, contributing to the increase in prudential solvency (see Section 3.1.2).

Spanish banks' debt issuance in 2025 H1 decreased compared with the same period of 2024. Compared with 2024 H2, the decline was more moderate, due in part to seasonal patterns, with recurrently weaker issuance in the second half of the year (Chart A2.3.1.3.1 in Annex 2). In year-on-year terms, there was a particularly notable reduction in senior unsecured debt (at a time when banks already held sufficient volumes of instruments to meet their minimum requirement for own funds and eligible liabilities (MREL) obligations)[13] and in senior secured debt.[14] This decrease in issuance was more pronounced at foreign subsidiaries of Spanish banks because of their lesser needs to roll over their debt financing in this period.

3.1.4 Credit

Credit developments

Growth in the stock of credit in Spain stepped up in 2025 H1. This was driven by economic growth and interest rate cuts. The year-on-year rate of growth in lending to households, firms and the self-employed stood at 2.7% in June 2025, compared with 0.8% in December 2024

11 Specifically, in 2025 H1 the currencies of the main economies where Spanish banks have a significant international presence that depreciated against the euro were: the US dollar by 12.8%, the pound sterling by 3.2%, the Mexican peso by 2.5%, the Brazilian real by 0.2% and the Turkish lira by 26.8%.

12 Banks' assets are funded by interest-bearing financial liabilities and other liabilities (referred to in this chapter as "liabilities") and equity. Thus, assets = liabilities + equity.

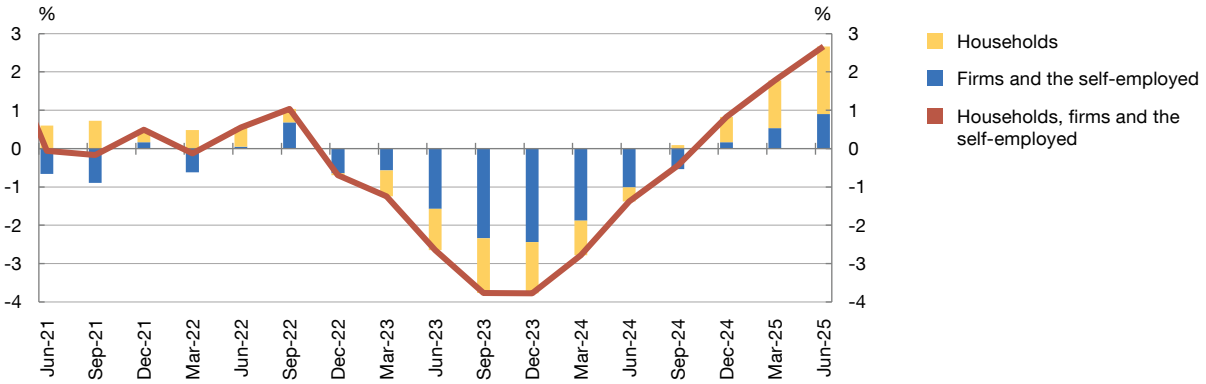
13 MREL is a requirement aimed at ensuring that banks have sufficient own funds and eligible liabilities to support the application of resolution tools and make sure that shareholders and certain creditors are the first to bear losses should the bank fail. Senior non-preferred debt also covers this requirement at a moderate cost for banks, as it is a class of debt whose holders would incur losses in the event of the bank's resolution, ranking below traditional senior debt holders in priority.

14 Secured debt (including covered bonds) comes with additional collateral, typically a pool of mortgage loans, thus providing the holder with dual recourse: a claim on the issuing bank itself and a preferential claim against the cover pool. Senior unsecured debt lacks collateral backing, but its senior status grants it highest priority among issuances without additional collateral for repayment in case of issuer bankruptcy.

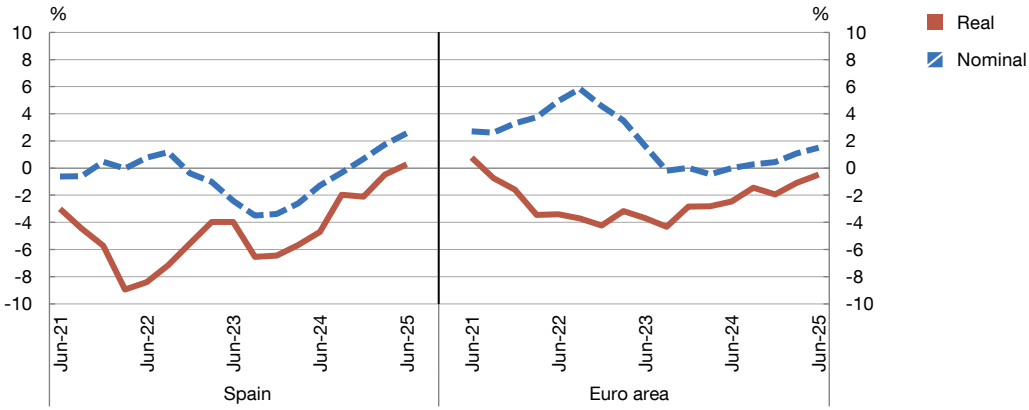
Chart 3.5

The year-on-year growth in the stock of lending to the private sector in Spain increased in 2025 H1, in both nominal and real terms, with the household segment making the biggest contribution

3.5.a Contributions to the year-on-year rate of change in lending to households, firms and the self-employed resident in Spain. Business in Spain. Individual data (a) (b)



3.5.b Nominal and real year-on-year rates of change in lending to households, firms and the self-employed. Business in Spain. Individual data (a)



SOURCES: ECB and Banco de España. Latest observation: June 2025.

a "Firms and the self-employed" denotes the institutional sectors of NFCs and sole proprietors.
b Lending by deposit institutions' branches in Spain.

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and the decline of 1.4% in June 2024. However, relative to nominal GDP growth of close to 6%, the growth in the stock of lending is moderate, as also analysed in the macro-financial indicators in Section 6.1 of this FSR (Chart 6.1). By sector, the increase in lending to households stood out, contributing 1.8 pp to the overall growth, versus 0.9 pp by lending to firms (Chart 3.5.a). These dynamics are still present in the data available to August.

Year-on-year growth in lending in real terms turned slightly positive in June 2025. Since end-2023 the year-on-year decline in real lending to households, firms and the self-employed has gradually slowed in Spain, mainly underpinned by the recovery in nominal lending but also by the easing of inflation. In recent quarters, year-on-year growth in real lending in Spain has gathered pace and turned marginally positive in June (Chart 3.5.b). In addition, since March 2025

it has outpaced that in the euro area as a whole, with a positive differential also observed in nominal terms. These developments arise after a protracted period of deleveraging following the global financial crisis, which was more pronounced in Spain than in the euro area.

The acceleration in lending to the private sector in Spain was widespread across banks in 2025 H1. However, there was somewhat more heterogeneity than in the preceding year and lending continued to decrease at a certain number of banks (Chart A2.3.1.4.1 in Annex 2).

Lending to households increased by 3.1% year-on-year in June 2025 , growing in both the consumer credit and loans for house purchase segments. Growth in the latter segment amounted to 2.4% year-on-year in June 2025, above the 0.5% recorded in December 2024 (see Section 4.1 of this FSR for a more detailed analysis). Other lending recorded stronger growth in the 12 months to June 2025 (5.5%) and also accelerated compared with December 2024 (4.2%), with the growth in lending for durable consumption standing out (12%).[15]

Lending to firms and the self-employed grew by 2.1%, with particular strength in the construction and real estate activities sectors. Credit performed unevenly across sectors. Lending to construction and real estate activities grew the most (up by 3.7% year-on-year to June), marking a change in trend, albeit starting from very low levels (see Section 4.1 of this FSR). Lending to other sectors also accelerated and grew to June 2025, but less so, with average year-on-year rates of 1%-2%. However, since property development and construction lending account for a moderate share of the total, its contribution to total growth was less than that of the other sectors[16] (Chart 3.6.a).

Large firms accounted for all recent credit growth. Lending to large firms increased by 5.5% year-on-year in June 2025 (up from 1.8% 12 months earlier). By contrast, in the SME segment the decline of recent quarters moderated considerably, although the rate of change remains negative (-0.9%). Lastly, credit to the self-employed fell by 3.1% year-on-year, also less than in previous quarters (Chart 3.6.b).

Credit stock growth was underpinned by a broad-based rise in new credit across sectors. New lending to households, firms and the self-employed in the 12 months to June 2025 was 13.5% higher than in the 12 months to June 2024. Of this new lending, 64% stemmed from new lending transactions, while the remaining 36% was due to increases in amounts drawn down on existing credit facilities. The 13.5% increase was driven by both firms

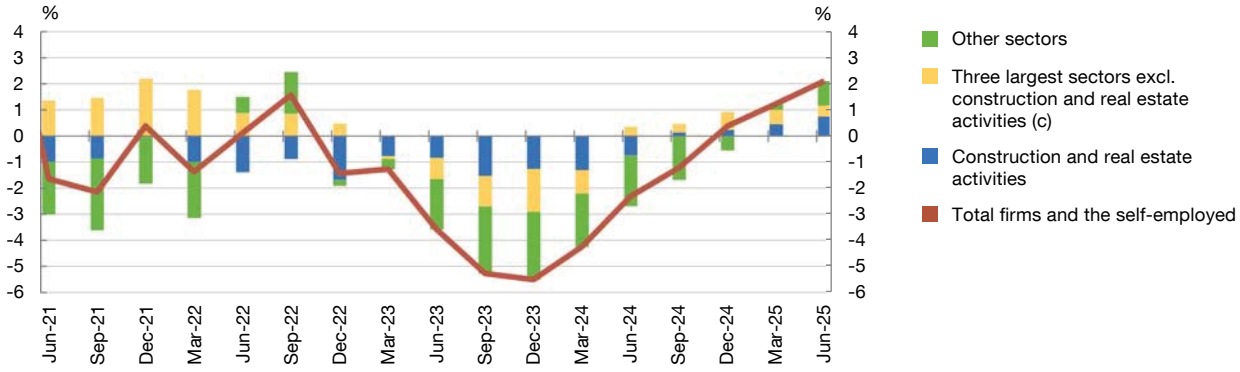
15 Lending for purposes other than house purchase includes, in addition to consumer credit, the purchase of land, the purchase of parking spaces and storerooms unrelated to house purchases, the purchase of securities and debt consolidation. In addition to deposit institutions, specialised lending institutions, whose figures are not included in this section, play a key role in consumer credit. In the case of these institutions, growth in consumer credit has increased more moderately, as described in Section 3.2 of this chapter.

16 At June 2025 construction and real estate activities accounted for 20.4% of lending to firms and the self-employed. Excluding these activities, the three sectors that account for largest share are trade and repairs, transportation and storage, and professional, scientific and technical activities. Overall they represented close to one-third of the total. The other sectors account for the remaining 45.8%.

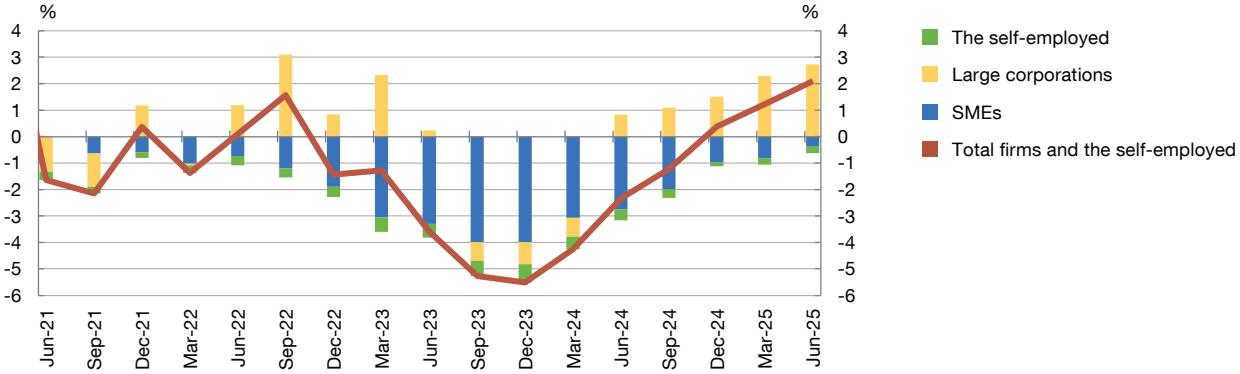
Chart 3.6

Growth in lending to firms and the self-employed was relatively stronger in construction and real estate activities, while, by firm size, it was concentrated entirely among large firms

3.6.a Contributions to the year-on-year rate of change in lending to firms and the self-employed resident in Spain, by sector. Business in Spain. Individual data (a) (b)



3.6.b Contributions to the year-on-year rate of change in lending to firms and the self-employed resident in Spain, by firm size. Business in Spain. Individual data (a) (b)



SOURCE: Banco de España. Latest observation: June 2025.

a The "Firms and the self-employed" category denotes the institutional sectors of NFCs and sole proprietors.
b Lending by deposit institutions' branches in Spain.
c The three largest sectors excluding construction and real estate activities are: trade and repairs, transportation and storage and professional, scientific and technical activities.

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(with growth of 12.4%) and households (with growth of 17.4%), where loans for house purchase stand out due to a year-on-year rise of 32%.[17]

However, in Spain the stock of bank lending to the resident private sector[18] has grown at a slower pace in recent months. The momentum[19] indicators for growth in lending to firms and

17 This rate is calculated by comparing the aggregate flow of new lending in the 12 months to June 2025 with that in the 12 months to June 2024, allowing the change in new lending to be compared with the change in the stock of credit. It is, therefore, different from the rate in Chapter 4, where the aim is to analyse the latest signal (over the past few quarters) in new lending dynamics.

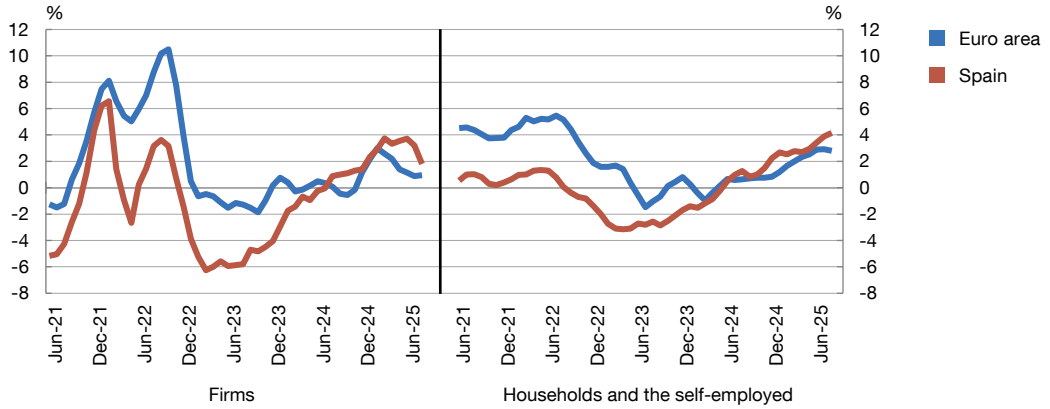
18 The resident private sector includes households, non-financial corporations (NFCs), the self-employed (also referred to as sole proprietors) and non-bank financial institutions (e.g. insurance companies).

19 The credit growth momentum indicator shows the annualised quarter-on-quarter rate of change in the three-month moving average of the seasonally adjusted credit stock.

Chart 3.7

Momentum indicators for lending to firms, households and the self-employed point to greater dynamism in Spain than in the euro area as a whole, despite the slowdown in corporate lending in August (a)

3.7.a Momentum indicator for the stock of loans to resident firms, households and the self-employed. Business in Spain. Individual data (a)



SOURCE: ECB. Latest observation: August 2025.

a Note A2.3.1.4.2 in Annex 2.

households and the self-employed accelerated in 2025 H1 more sharply than in other European countries (Chart 3.7). However, the available data for August point to a certain slowdown in lending to firms. For this segment, the annualised indicator stood at 1.8% in August 2025, almost 2 pp less than in June. In lending to households, the indicator stood at 4.2% at the same date.

At consolidated level, the stock of credit with foreign private counterparties fell in year-on-year terms, owing partly to exchange rate developments. In June 2025 it contracted by 0.1%, contrasting with the 4.4% increase observed 12 months earlier. By material geographical area, the stock of credit declined across most regions, except Türkiye,[20] falling by 9.1% in Brazil, 2.8% in the United States, 2% in Mexico and 1.9% in the United Kingdom. A significant part of this behaviour is explained by the depreciation of these countries' currencies against the euro.[21]

Credit quality

In the first half of the year the decline in non-performing and stage 2 loans to the resident private sector gathered pace. The continuation of this downward trend was favoured by economic growth and improved financing conditions, which reduce borrowers' debt burden. Specifically, non-performing loans (NPLs) decreased by 10.9% between

20 In the case of Türkiye, the robust growth of the business amid high inflation, together with a slight easing of the reference rates since May, has more than offset the negative impact stemming from the depreciation of the Turkish lira.

21 Between June 2024 and June 2025, the Mexican peso depreciated against the euro by 11.7%, the US dollar by 8.7%, the Brazilian real by 7.1% and the pound sterling by 1%.

June 2024 and June 2025, while stage 2 loans[22] fell even more sharply, with an aggregate year-on-year decline of 16.5%.

NPLs declined across nearly all segments. However, within households they rose in the consumer loan portfolio (+3.2%), although they fell in the house purchase segment (-16%). For firms, the decline was 9.8%. Stage 2 loans saw improvements across the board.

NPL and stage 2 ratios in the resident private sector performed favourably in 2025 H1. This was driven by a reduction in credit volumes in both risk categories and an increase in the total stock of loans. In June 2025, the NPL ratio for the resident private sector as a whole improved across the board, declining by 0.4 pp to 2.9% (Chart A2.3.1.4.3 in Annex 2). The stage 2 ratio fell to 5.7%, 1.3 pp less than in June 2024 (Charts 3.8.a and 3.8.b). The NPL ratio remains on a downward path in the latest data (for August).

The outstanding amount of the loan portfolio backed by the Official Credit Institute's (ICO) COVID-19 guarantee facility[23] continued to decrease in recent quarters. This amount stood at €29 billion in July 2025, 35.8% less than a year earlier. NPLs in this portfolio dropped by 2.3% over this period, while stage 2 loans did so much more sharply, by 43.7%. Despite this strong performance, the decline in the outstanding amount of ICO-backed loans – which largely stems from the fact that this is a closed portfolio where no new loans are granted but repayments continue – caused the stage 2 ratio to only decrease by 2.9 pp (to 20.5%) and the NPL ratio to rise by 9.5 pp (to 27.8%).[24]

Refinanced and restructured transactions have remained on the downward path of recent years, in both the household and firm segments.[25] Specifically, of the stock of loans to households in June 2024, 0.2% was refinanced or restructured up to June 2025. In the case of firms, this proportion stood at 0.5%. These figures are slightly below those of recent years and significantly lower than in the period June 2020-June 2022, when the rate for households ranged from 0.3% to 0.5% and that for firms from 0.9% to 1.9%.

Meanwhile, the flow of renegotiations and roll-overs appears to have picked up in the firms and the self-employed segment. These are loans involving changes in their terms and conditions to borrowers showing no sign of financial difficulty. In the 12 months to June 2025 they accounted for 15% of the outstanding balance a year earlier, thus prolonging the rising trend of previous years, in a context marked by interest rate changes (Chart A2.3.1.4.4 in Annex 2).

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22 Pursuant to Circular 4/2017, a loan is classified as a stage 2 exposure when credit risk has increased significantly since initial recognition, but no default event has occurred.

23 Royal Decree-Laws 8/2020, 25/2020 and 34/2020 enacted and regulated the State guarantee facilities for firms and the self-employed. These facilities aimed to address the liquidity needs generated by the restrictions on activity and movement imposed to combat the COVID-19 pandemic. In mid-2021 this loan portfolio amounted to over €90 billion.

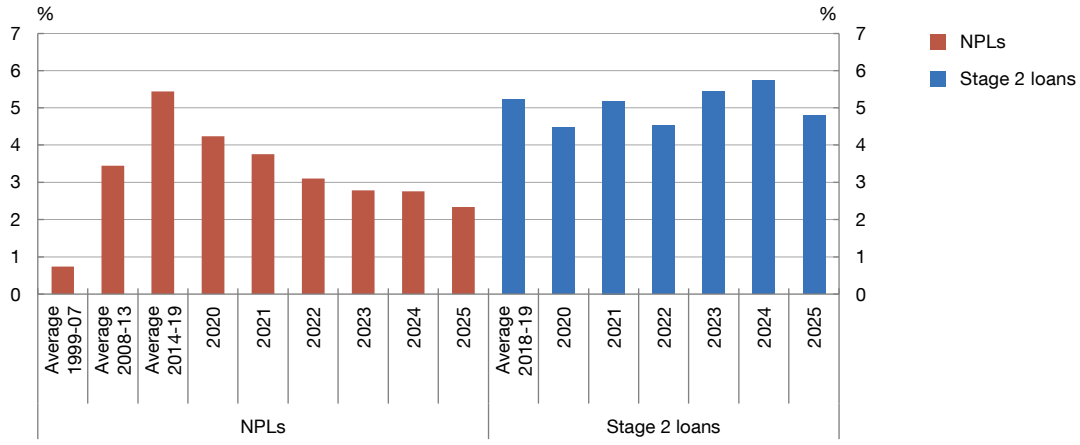
24 Had the amount of these loans (the ratio's denominator) remained constant at its July 2024 level, the NPL ratio would have decreased by 0.4 pp to 17.8%. Under the same assumption, the stage 2 loan ratio would have declined by 10 pp to 13.1%.

25 Refinancing is granted to facilitate the compliance of borrowers in financial difficulties with one or more (refinanced) transactions; restructuring is where the contractual terms are amended to facilitate payment of the debt due to the borrower's difficulty to pay. By contrast, renegotiation is where the financial conditions are amended without the borrower being in financial difficulties, and a roll-over is a loan arranged to replace another previously extended by the bank without the borrower being in financial difficulties.

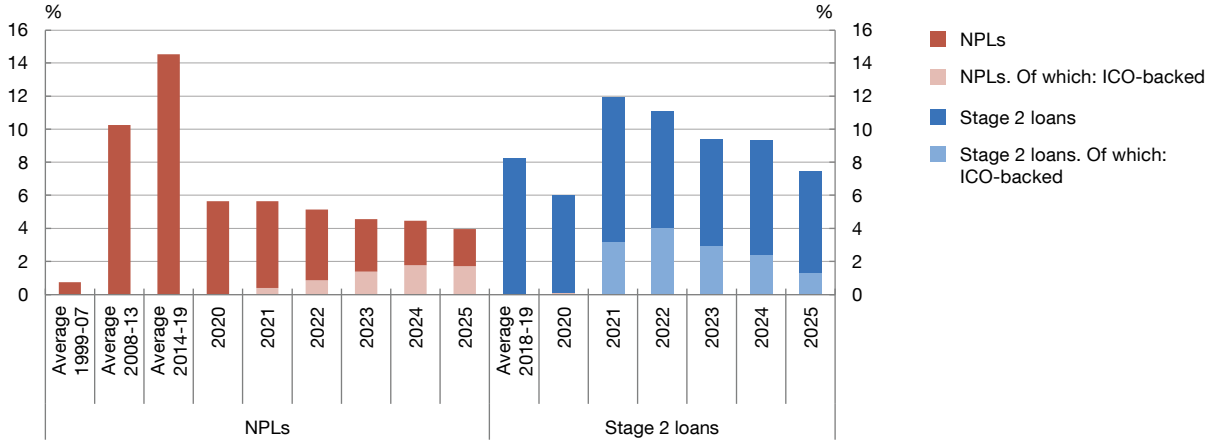
Chart 3.8

The NPL and stage 2 ratios continued to decline both for households and for firms and the self-employed

3.8.a Share of loans to households resident in Spain classified as non-performing and stage 2. June of each year. Business in Spain. Individual data (a)



3.8.b Share of loans to firms and the self-employed resident in Spain classified as non-performing and stage 2. June of each year. Business in Spain. Individual data (a) (b)



SOURCE: Banco de España. Latest observation: June 2025.

a Lending by deposit institutions' branches in Spain.
b The figures for firms and the self-employed correspond to data reported for NFCs and sole proprietors. Lighter colours show the contribution to the ratio of ICO-backed loans to NFCs and sole proprietors.

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At consolidated level, the quality of Spanish banks' loans to foreign counterparties held steady between June 2024 and June 2025, with some heterogeneity across jurisdictions. For business abroad overall, the NPL ratio stood at 3% in June 2025, 0.1 pp less than in the same month of 2024. The ratio increased moderately in Brazil (by 1.6 pp, to 8.9%) and marginally in Türkiye (by 0.4 pp, to 4.6%), while in other key jurisdictions the ratio observed was similar to last year's.

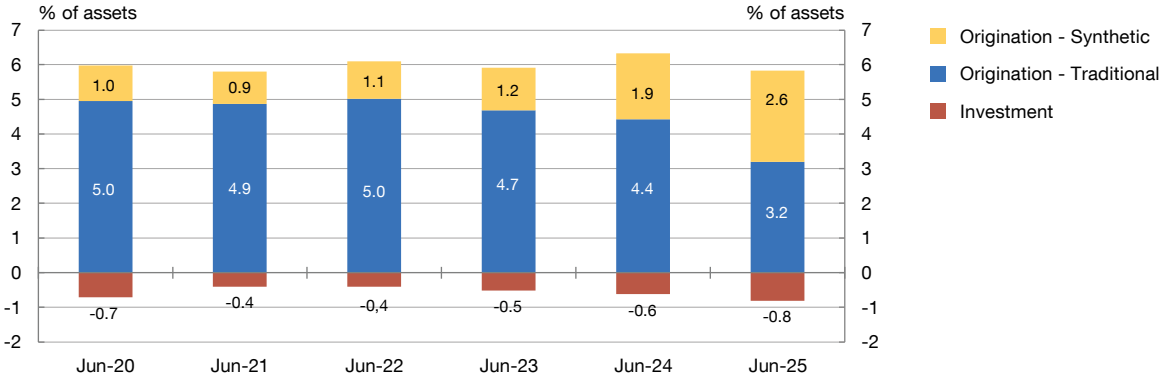
Securitisations

The outstanding amount of securitisations originated by Spanish banks in Spain and abroad has held steady in recent years, with synthetic securitisations accounting for a

Chart 3.9

Securitisations as a share of the consolidated balance sheet have remained stable in recent years, with an increasingly higher share of synthetic securitisations

3.9.a Ratio of the outstanding amount of originations (distinguishing between synthetic and traditional securitisations) and investment in securitisations to total consolidated assets (a)



SOURCE: Banco de España. Latest observation: June 2025.

a Note A2.3.1.4.6 in Annex 2.

growing share of this amount. In June 2025 the stock of securitisations amounted to €230 billion, a figure comparable to the average for the period 2020-24 (€231 billion). The ratio of the outstanding amount of securitisation originations to the consolidated total assets of banks acting as originators or investors in these financial instruments stood at 5.8%, near the 2020-24 average (6%) (Chart 3.9). Synthetic securitisations as a share of total securitisation originations have increased from 17% in 2020 to 45% in June 2025 and now account for 2.6% of consolidated assets. Meanwhile, the ratio of the outstanding amount of investment in securitisations to total consolidated assets was just 0.8% in June 2025. Lastly, within the group of originating banks, the ratio between the amount of new origination transactions backed by loans granted in Spain and new lending to households and firms in Spain was 11% in June 2025, up 1.3 pp on June 2024 (Chart A2.3.1.4.5 in Annex 2).

3.1.5 Financing conditions and liquidity

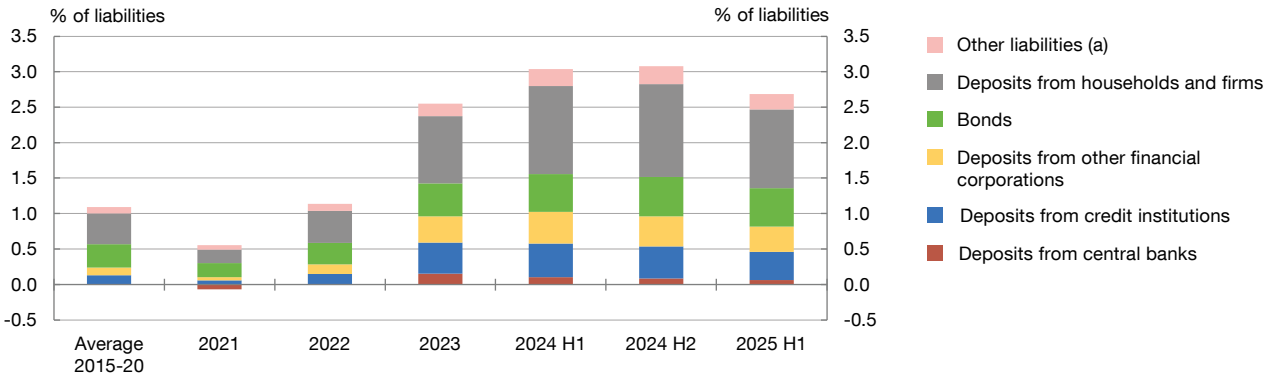
Cost of liabilities

In 2025 H1 the reduction in reference interest rates was passed through to the average cost of liabilities, albeit not fully. The average cost of liabilities decreased to 2.7% in annualised terms, down from 3.1% in 2024 H2 (Chart 3.10.a). This reduction was driven mainly by deposits from households and firms, particularly by the decline in their cost in business in Spain (Chart A2.3.1.5.1 in Annex 2). The lower cost of interbank funding and funding from other financial corporations also contributed to the decrease in the average cost of liabilities. However, the reference interest rate cut was not fully passed through, resulting in a smaller reduction in the average cost of liabilities (Chart 3.10.b). This partial pass-through of both

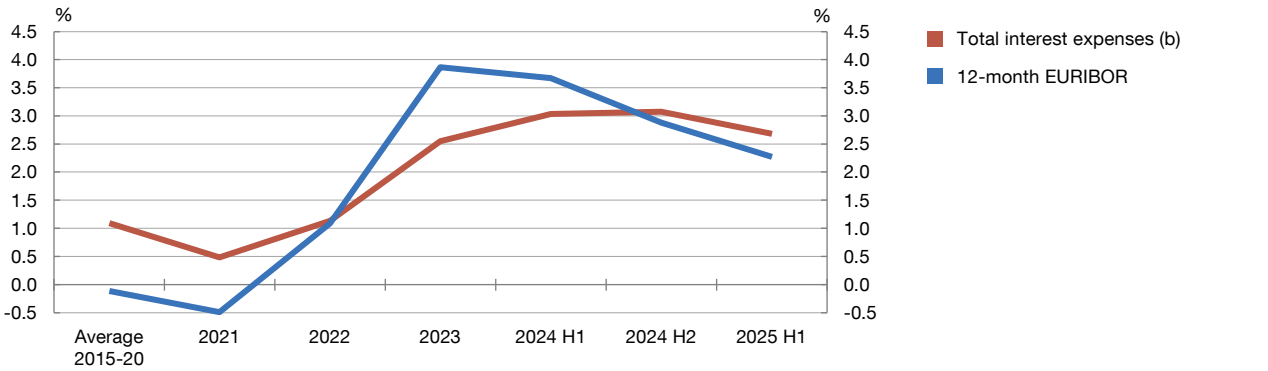
Chart 3.10

The decrease in reference interest rates drove down the average cost of liabilities in 2025 H1

3.10.a Interest expenses as a share of liabilities. Consolidated data



3.10.b Interest expenses as a share of liabilities and 12-month EURIBOR. Consolidated data



SOURCE: Banco de España. Latest observation: June 2025.

a Includes interest paid on liabilities to general government and other interest expenses associated with other financial liabilities and other liabilities.
b Expressed as a percentage of total liabilities. Excludes expenses associated with interest rate hedge derivatives.

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upward and downward reference market rate movements reflects the high share of retail funding in Spanish banks' liability structure.

The average cost of new debt issued by Spanish banks remained stable in 2025 H1. This stability was thanks to the decline in risk-free reference interest rates, which offset the upward pressure associated with other market factors and the degree of subordination and maturity of new issuances (Chart A2.3.1.5.2 in Annex 2). In the case of senior unsecured debt and senior non-preferred debt, the spread between Spanish banks' issuance costs and the sovereign bond narrowed, falling in line with or even below the average spread for other European banks (Charts A2.3.1.5.3 and A2.3.1.5.4 in Annex 2).

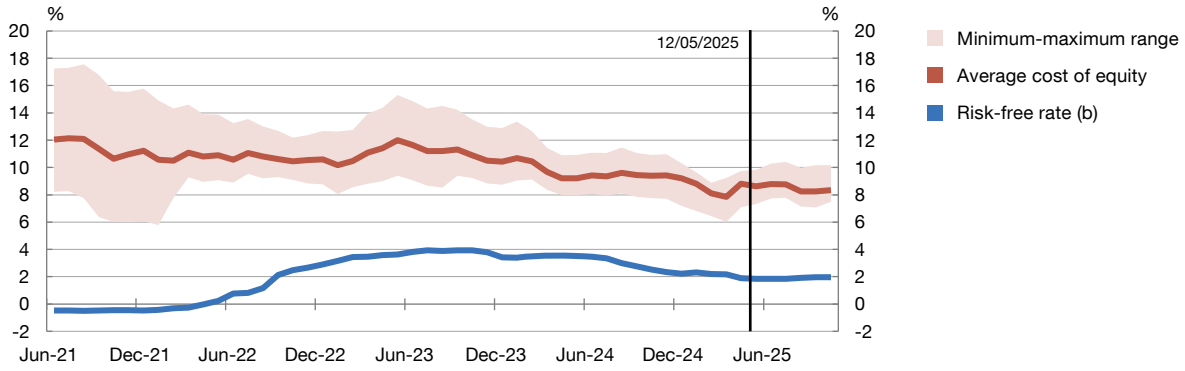
Cost of equity

Spanish banks' cost of equity (COE) has held steady since May at historically moderate values. The COE for Spanish banks has dropped by around 0.4 pp since the publication of the

Chart 3.11

The cost of equity has remained broadly stable since May 2025

3.11.a Cost of equity of the main Spanish listed banks (a)



SOURCES: Banco de España, Refinitiv Eikon, Datastream and Consensus Economics. 12/05/2025 was the cut-off date for the last FSR. Latest observation: 29 October 2025.

a The average and minimum-maximum range of the COE are based on four dividend discount models: Ohlson and Juettner-Nauroth (2005), simplified Ohlson and Juettner-Nauroth (2005), Fuller-Hsia (1984) and Altavilla et al. (2021). See L. Fernández Lafuerza and M. Melnychuk. (2024). "Revisiting the estimation of the cost of equity of euro area banks". *Financial Stability Review - Banco de España,* 46, pp. 24-46.
b The risk-free rate used is the 1-year overnight index swap (OIS) in euro.

last FSR, to between 7.5% and 10.2% at the cut-off date for this report, depending on the method used to estimate it. The current level is low by historical standards and stands below that observed in December 2024 (Chart 3.11).[26] The range of COE estimates lies below the Spanish banking system's ROE (14.6% in June 2025, see Section 3.1.1).

Liquidity

Spanish banks' liquidity remains comfortably above the required threshold. In September 2025 Spanish banks' overall liquidity coverage ratio (LCR) stood at 174.4%, compared with 181.4% a year earlier. Despite this decline, which was broad-based across banks, the LCR is well above the regulatory minimum of 100% and remains slightly higher than the average LCR of the main European banks.[27]

The Spanish banking system's stable funding is also at comfortable levels. The net stable funding ratio (NSFR), which measures banks' longer-term funding capacity, stood at 135.3% in June 2025 (up 4.2 pp on a year earlier), a solid position that is also above the European average.[28]

26 The COE is the return investors demand to buy a firm's shares. It is unobservable and its estimation is subject to significant uncertainty. The values presented here are the average value and the minimum-maximum range of four dividend discount models, calculated as the weighted average estimate for the main Spanish listed banks. See Luis Fernández Lafuerza and Mariya Melnychuk. (2024). "Revisiting the estimation of the cost of equity of euro area banks". *Financial Stability Review - Banco de España,* 46, pp. 24-46.

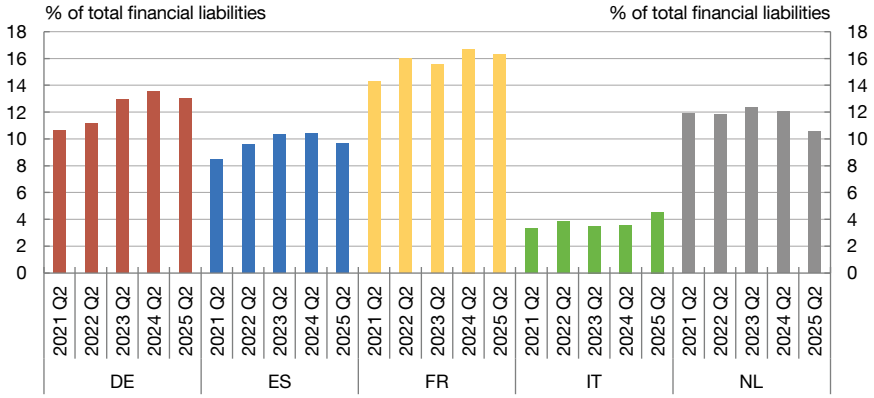
27 According to EBA data, in June 2025 the main Spanish banks had an LCR of 164.9%, compared with an average of 161.6% for European banks overall.

28 According to EBA data, in June 2025 the main Spanish banks had an average NSFR of 133.2%, compared with an average of 127.2% for European banks overall.

Chart 3.12

Spanish banks are less exposed to dollar funding via cross-border positions and local positions outside the United States than most peer European banking systems

3.12.a European comparison of the percentage of dollar funding in cross-border and foreign currency-denominated local positions (a)



SOURCE: BIS. Latest observation: June 2025.

a The data used, taken from the BIS' Locational Banking Statistics, aggregate the liabilities of individual banks at consolidated group level. They therefore include intra-group operations. Dollar funding comprises cross-border funding in dollars and funding obtained through banks' local positions excluding local positions in the United States.

Funding risk in Spanish banks' key operating currencies is limited and, in the case of the dollar, lower than in peer European banking systems. The LCR and the NSFR can also be calculated by currency, for the currencies relevant to a bank's operations. For Spanish banks overall both ratios exceeded 100% in all relevant currencies, mitigating funding risk in those currencies. Spanish banks' funding risk in US dollars (whether through cross-border positions or local positions outside the United States)[29] is lower than at other European banks. According to data from the Bank for International Settlements (BIS), in June 2025 9.7% of Spanish banks' financial liabilities were dollar-denominated liabilities in such positions, compared with 13% for German banks and 16.3% for French banks (Chart 3.12).

3.2 Non-bank financial sector

Overall non-bank financial sector developments

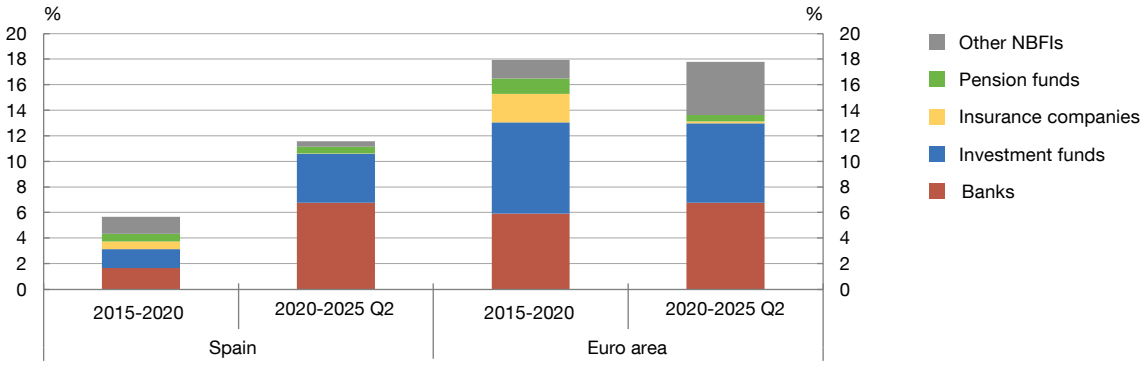
Over the last decade the dynamism of the non-bank financial intermediary (NBFI) sector has contributed notably to financial asset growth in both Spain and the euro area as a whole. Between 2015 and 2020 the NBFI sector was responsible for most of the growth in financial assets in both jurisdictions (Chart 3.13.a). Between 2020 and 2025 Q2 developments in the euro area as a whole were similar to those observed in the previous five years. By

29 Dollar funding obtained by US subsidiaries through their retail activity primarily comprises local deposits. These deposits are more stable and less exposed to external tensions than funding via cross-border positions or dollar operations in the local business of countries other than the United States.

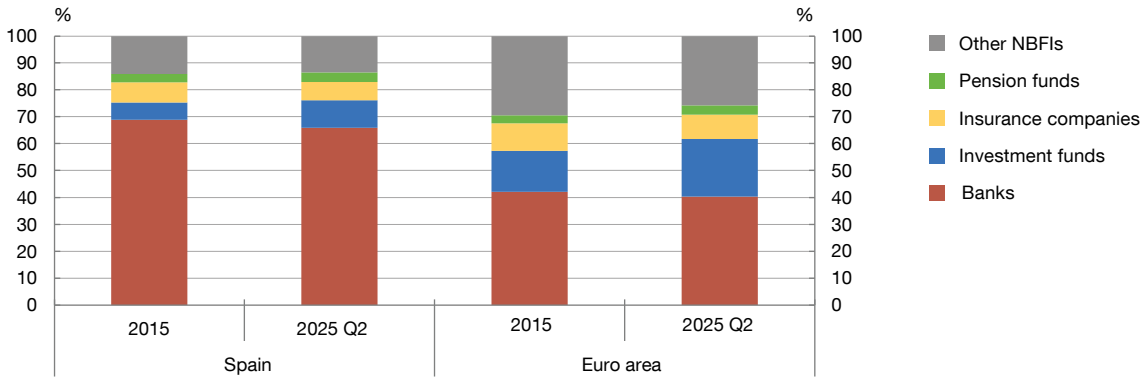
Chart 3.13

Over the past decade the NBFI sector has contributed notably to financial asset growth in both Spain and the euro area, although it continues to account for a much smaller share of total assets in Spain

3.13.a Contribution of each sector to financial asset growth in Spain and the euro area. Non-consolidated data (a) (b)



3.13.b Weight of the banking and non-bank financial sectors in total assets of both sectors in Spain and the euro area. Non-consolidated data (a) (b)



SOURCES: Banco de España and ECB. Latest observation: June 2025.

a Note A2.3.2.1 In Annex 2.
b See Chart A2.3.2.2 in Annex 2 for more information about the composition of the "other NBFIs" sector.

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contrast, in Spain the banking sector contributed somewhat more to financial asset growth than the NBFI sector during this period. As a result of these dynamics, by the end of 2025 Q2 the NBFI sector accounted for 34.1% of total financial assets in Spain (almost 3 pp more than in 2015), while in the euro area it accounted for 59.7% (Chart 3.13.b).[30]

Investment funds have played a key role in this expansion. This was the case in Spain and the euro area as a whole[31] in both five-year periods. Domestically, investment funds played a more prominent role between 2020 and 2025 accounting for practically all NBFI sector growth.

30 The Financial Stability Board (FSB) also documents the expansion of the NBFI sector worldwide. For more details, see Financial Stability Board. (2024). *Global Monitoring Report on Non-Bank Financial Intermediation*.

31 Since end-2015 total assets managed by investment funds have increased by 79.9% in Spain and 92.7% in the euro area.

In the euro area as a whole, their contribution to NBFI sector growth over the periods 2015-20 and 2020-25 remained more consistent. Other non-bank sectors have also contributed significantly to the expansion of the NBFI sector.

Global risks tied to liquidity and leverage in some NBFIs have been identified. These factors could amplify the impact of potential shocks on financing conditions and availability. The FSB has published a series of reports and recommendations aimed at better managing these risks in the NBFI sector.[32]

Investment funds

The total assets of Spanish investment funds continued to grow in 2025 H1. Specifically, these funds grew by 5.7% during this period. A similar trend, albeit less pronounced, was likewise observed in the euro area as a whole, with growth of 1.3%.

In 2025 H1 the assets under management of Spanish equity funds showed minimal growth, while fixed-income and mixed funds posted cumulative increases. Specifically, the value of assets under management in fixed-income and mixed funds rose by 5.8% and 3.4%, respectively. As a result, fixed-income funds remain the leading segment in Spain's investment fund sector, accounting for 39% of total assets (22.1% in the euro area). By contrast, equity funds represent just 14.6% of the Spanish market, while in the broader euro area they constitute the predominant segment (34.7% of the total).

Overall, investment funds domiciled in Spain have low leverage levels, below those of euro area funds. The leverage ratio[33] for Spanish funds stands at close to 100%, reflecting virtually zero debt (Chart 3.14).[34] This sets the Spanish market apart from the euro area as a whole, where leverage is higher across all fund categories (by fund type). The difference is particularly evident in hedge funds, with leverage ratios in 2025 Q2 of 102.8% in Spain compared with 156.2% in the euro area.[35] This provides investment funds domiciled in Spain with some resilience against potential market shocks, thereby limiting the transmission of stress through to other markets or financial intermediaries. However, by their very nature, abrupt and pronounced market corrections would erode funds' net asset values and could drive up fund outflows.

Spanish investment funds' liquidity levels have declined across all fund types compared with previous years, yet remain higher than for euro area funds overall. In 2025 H1 average

32 See, for example, Liquidity Preparedness for Margin and Collateral Calls and Leverage in Nonbank Financial Intermediation.

33 The leverage ratio for investment funds is measured as total assets under management over the value of shares/units issued.

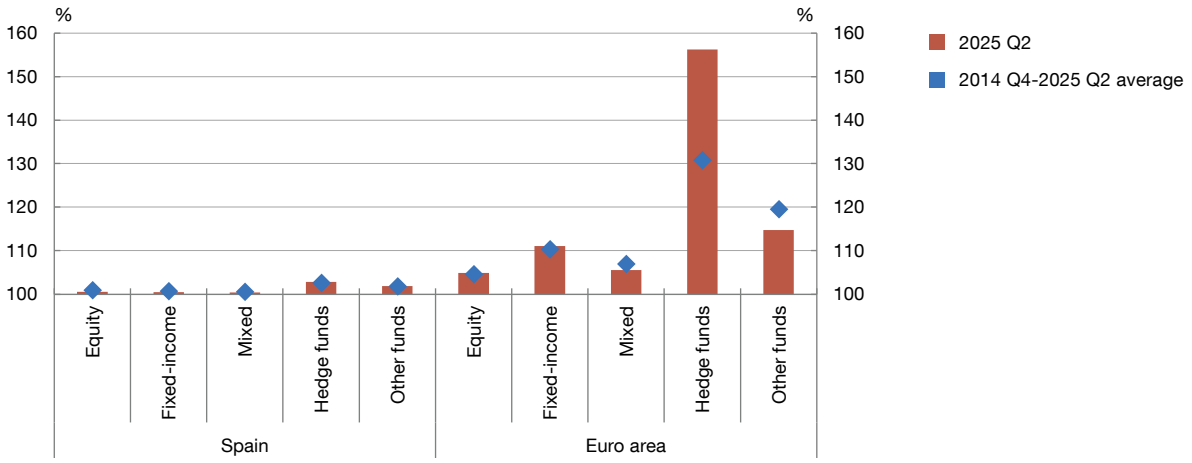
34 Further leverage can be accumulated through exposure to derivatives. In any event, the leverage ratio of funds domiciled in Spain at end-2024 was low even considering such exposure: 110.5% for fixed-income funds, 114.3% for equity funds and 119.7% for mixed funds.

35 In any event, hedge funds account for only a minor share of the sector, at just 1.6% of total funds in Spain and 2.2% in the broader euro area.

Chart 3.14

Spanish investment funds have low leverage, less than comparable funds in the euro area

3.14.a Leverage, by fund type. Spain and euro area (a) (b)



SOURCES: Banco de España and ECB.

a, b Note A2.3.2.3 in Annex 2.

liquidity ratios[36] in Spain stood at 5.6% for equity funds, 5% for fixed-income funds and 4% for mixed funds (Chart 3.15), above the levels for euro area-domiciled funds (2.2%, 3.3% and 4%, respectively). Among Spanish funds, the drop in liquidity ratios observed to March 2025 was sharper for fixed-income and mixed funds (3.8 pp and 3.7 pp, respectively, on the 2018-25 average) than for equity funds (a more moderate 1 pp below the 2018-25 average). In any event, these lower liquidity ratios do not necessarily represent a significant risk factor. First, this decline may have been influenced by the use of new liquidity management tools[37] and, second, a full assessment requires an examination of liquidation risk, as follows.

The risk of funds liquidating assets due to large-scale redemptions is low compared with the levels observed over the past decade. For instance, in 2025 H1 the percentage of total assets potentially affected by unusually high redemptions[38] was 2% for equity funds,

36 The liquidity ratio for investment funds is measured as cash over total assets under management. This is a restrictive definition of liquidity, as funds also have other high-quality assets, such as highly liquid euro-denominated government debt. This metric enables a historical comparison of liquidity with that of euro area funds by fund type. However, there are broader alternative metrics for which only data on funds domiciled in Spain are available. For instance, the ratio of high-quality liquid assets (HQLAs) – which, in addition to cash, includes high-quality government debt – stood at 38.1% for fixed-income funds, 8.92% for equity funds and 20.62% for mixed funds in December 2024.

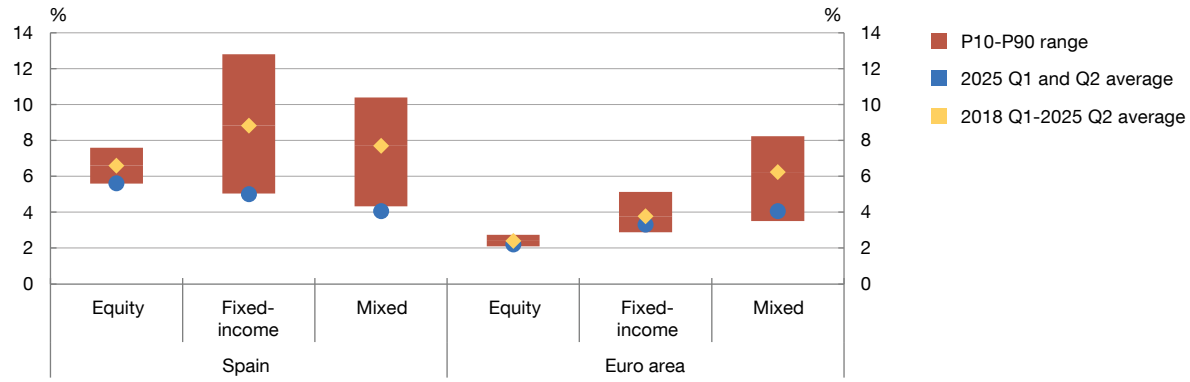
37 These developments may have been influenced by the use of new liquidity management tools. One such example is swing pricing, whereby fund managers apply a "swing price factor" to adjust a fund's net asset value in times of stress, penalising investors who sell their units. This mechanism protects investors who remain in the fund from dilution and indirectly eases liquidity pressures by discouraging redemptions in adverse scenarios, thereby reducing the need to maintain high liquidity levels.

38 A fund is potentially affected by unusually high redemptions when the ratio of net capital flows to total assets is below the 10th percentile of the historical distribution (2013 Q4 - 2025 Q2) for the same fund type. Among these funds, the assets affected by high redemptions are those equivalent to the proportion of negative net flows exceeding the historical 10th percentile. For instance, if a fund has net flows equivalent to -10% of its total assets and the historical 10th percentile is -5%, then an estimated 5% of its assets are potentially affected by high redemptions.

Chart 3.15

In June 2025 Spanish investment funds' liquidity levels were lower than in previous years, but higher than for the euro area overall

3.15.a Liquidity ratio in 2018 Q1-2025 Q2, by fund type. Spain and euro area (a) (b)



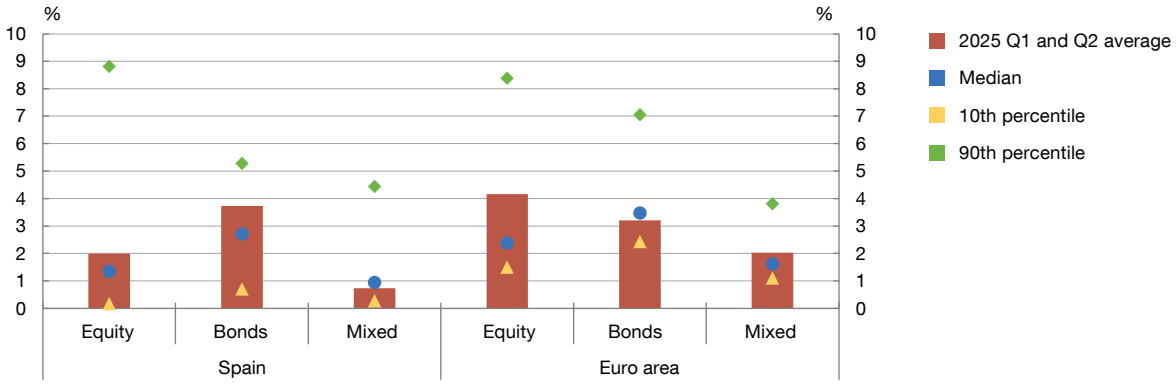
SOURCES: Comisión Nacional del Mercado de Valores and Lipper Refinitiv for Asset Management.

a, b Note A2.3.2.4 in Annex 2.

Chart 3.16

The percentage of assets potentially affected by large-scale redemptions is low compared with the values observed since 2013

3.16.a Assets potentially affected by large-scale redemptions, by fund type. Spain and euro area (a) (b)



SOURCE: Refinitiv Lipper for Asset Management.

a, b Note A2.3.2.5 in Annex 2.

3.7% for fixed-income funds and 0.7% for mixed funds (Chart 3.16). This percentage was slightly higher for funds domiciled in the euro area (4.2%, 3.2% and 2%, respectively). However, in both Spain and the euro area the percentage of assets potentially affected by unusually high redemptions remains well below the levels recorded between 2013 and 2025. In any event, it is worth bearing in mind that the hypothetical liquidation of assets in a crisis

represents a potential systemic risk. Spanish, European and global funds selling off these assets could drive down their prices and this could impact other financial institutions that hold them in their portfolios.

Pension funds

In June 2025 Spanish pension fund benefit payments continued to exceed gross contributions, although the gap narrowed by 20% year-on-year.[39] Gross contributions were 1.2% higher in June 2025 than a year earlier, despite the lower fiscal incentives available since 2021.[40] Benefit payments, meanwhile, were down by nearly 5.7%. In addition, total pension plan assets increased by close to 3% year-on-year to June 2025, primarily driven by rising financial markets, which offset the net negative contributions.

Moreover, short-term profitability has declined markedly, reversing the upward trend that began in late 2022. One-year profitability stood at 4.4% in June 2025, down from 8.4% in June 2024. Long-term profitability (over 25 years) declined more moderately, from 2.3% in June 2024 to 2.2% in June 2025.[41] Should the risk of market corrections materialise, they would likely impair the sector's profitability further and weigh on its asset values.

Insurance companies

The volume of premiums in the Spanish insurance sector increased by 12.2% year-on-year in 2025 H2, driven chiefly by a buoyant life insurance business. Specifically, life insurance premiums grew by 18.2% on June 2024,[42] while non-life premiums rose by 8%. As a result, the life insurance business' relative share of total premiums rose from 40.6% in June 2024 to 42.8% in June 2025. This stands in contrasts to the drop in premium volumes in the life insurance business and in the insurance sector as a whole over 2024. At end-2025 Q2 the sector's total assets had grown 4.9% on a year-on-year basis.

Profitability in the insurance sector continued its gradual improvement, while solvency held stable. The return on equity stood at 8.2% at end-2025 Q2, up by around 1 pp on a year earlier, shoring up the growth trajectory that began in 2023. The solvency ratio – measured as eligible own funds over the solvency capital requirement – remained stable at high levels, reaching 239.9% in 2025 Q2, just 2 pp below the end-2024 level and in line with the stability observed over the past decade.

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39 Net contributions to pension funds are calculated as the difference between gross contributions and benefit payments.

40 The maximum pension fund contribution amount that is deductible for personal income tax purposes declined from €8,000 per year in 2020 to €2,000 in 2021 and €1,500 in 2022 (see Article 59(2) of the State Budget for 2022).

41 Short and long-term profitability refers to the time horizon over which the annual average returns of pension funds are measured.

42 This rise was driven by low interest rates, which spurred overall credit growth, a significant portion of which is tied to life insurance products.

Specialised lending institutions.

Despite overall growth in consumer credit, special lending institutions (SLIs) saw their consumer lending business shrink in 2025 H1. The drop in the period amounted to 3.2%, although the year-on-year change in June 2025 held in positive territory (2.3%). As a result, there was a decrease in SLIs' market share of the total consumer credit provided by SLIs and banks (down by 1.2 pp since last December to 18.9%).[43] The share of consumer credit in total lending extended by SLIs also shrank (by 0.4 pp in the last six months, to 45.2%).

As for credit quality, the NPL ratio for consumer loans extended by SLIs edged up in 2025 H1. Specifically, the ratio rose by 0.2 pp to 3.7%, still well below the figure for the banking sector in this product segment (4.1%). The ratio is likewise below that for the overall SLI credit portfolio (5.4%), despite the latter falling by 0.2 pp in H1. Meanwhile, the share of SLI consumer credit classified as stage 2 rose by 0.2 pp compared with December 2024, reaching 6.4% (6.6% for banks as a whole, following a drop of 0.7 pp).

3.3 Systemic interconnections

Interbank interconnections of Spain's main banks are globally balanced between assets and liabilities. Overall, financing extended by Spanish banks to other credit institutions accounted for 7.9% of their total assets in June 2025. This financing is mostly in the form of interbank loans, predominantly with euro area counterparties and, to a lesser extent, counterparties in other advanced or Latin American economies. Financial liabilities with other credit institutions represented 7.7% of assets at end-2025 H1. Like financing extended, funding received is mainly channelled through interbank loans, with a geographical distribution of counterparties similar to that on the asset side (Chart 3.17.a).

Interconnections with NBFIs worldwide are stronger on the asset side than on the liabilities side, with greater concentration among non-euro area counterparties. In June 2025 financing extended to NBFIs, essentially through loans, accounted for 7.9% of major Spanish banks' total assets. More than half of this financing was to counterparties domiciled in non-euro area advanced economies, primarily the United States and the United Kingdom. Funding received, mainly via deposits, represented 7% of assets. Here, counterparties were somewhat less concentrated among other advanced economies, with Spanish and Latin American counterparties featuring more prominently (Chart 3.17.b).

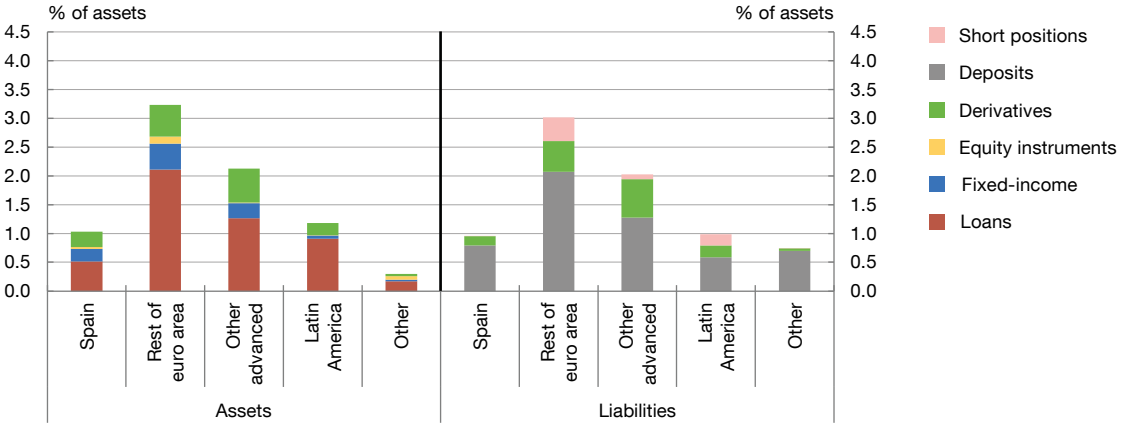
Spanish banks' interconnections with the global banking sector remain at levels similar to those of 2017. In year-on-year terms to June 2025, interbank liabilities held stable, while interbank positions on the asset side decreased by a slight 0.8 pp as a share of total consolidated assets. The interbank business has shown some volatility in recent

43 During the reference period no SLIs exited the market as a result of mergers or absorptions by banks.

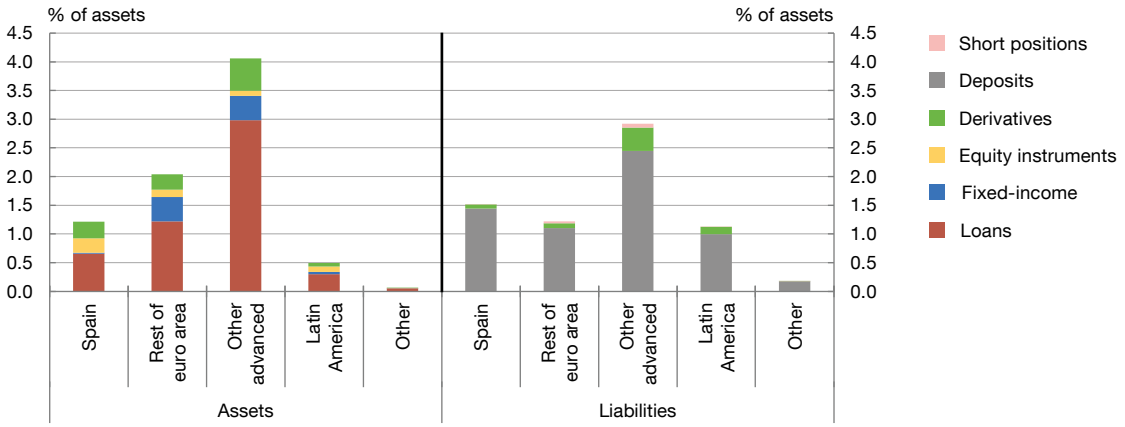
Chart 3.17

Interconnections with the financial sector represent around 15% of the consolidated assets of the major Spanish banks and are mainly concentrated in the euro area and other advanced economies

3.17.a Spanish banks' exposure to credit institutions, by residence of the counterparty. June 2025. Consolidated data. Significant institutions (a)



3.17.b Spanish banks' exposure to other financial institutions, by residence of the counterparty. June 2025. Consolidated data. Significant institutions (a)



SOURCE: Banco de España. Latest observation: June 2025.

a Data for the eight significant institutions reporting the geographical breakdown of liabilities by residence of the counterparty. At June 2025 the assets of banks reporting this information represented 97% of the assets of all significant institutions.

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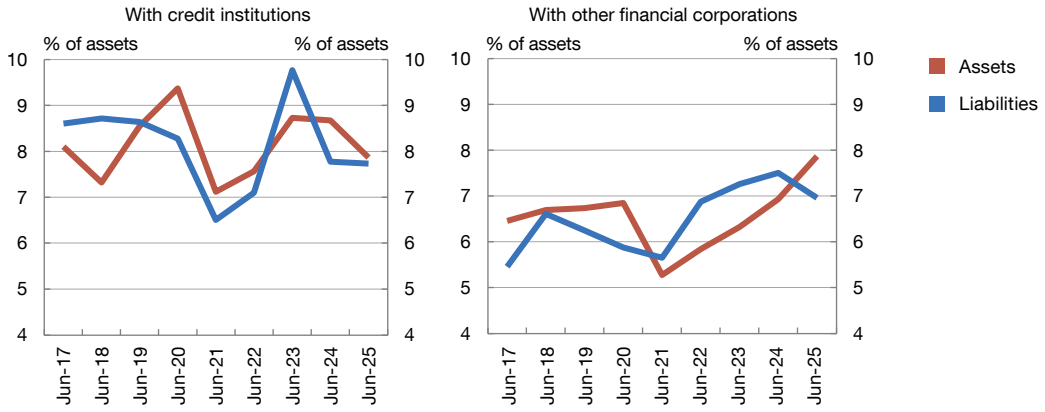
years, influenced by both central bank liquidity programmes and standard monetary policy decisions.

Business with other financial intermediaries has increased. On the asset side, interconnections with NBFIs continued to grow during the twelve months to June 2025, reaching their highest level since 2017. In that month the average exposure stood at 7.9% of total assets, an increase of 0.9 pp on a year earlier and up 1.3 pp on the average for the period 2017-25. Interconnections on the liabilities side were somewhat lower (7% of total consolidated assets in June 2025, down by 0.5 pp year-on-year). However, the most recent figure remains 0.5 pp above the 2017-25 average (Chart 3.18). In the absence of consolidated data comparable

Chart 3.18

Interconnections with other credit institutions remain at similar levels to 2017, while interdependence with the NBFI sector has increased

3.18.a Exposure of the banking sector to credit institutions and other financial corporations. Consolidated data. Significant institutions (a)



SOURCE: Banco de España. Latest observation: June 2025.

a Data for the eight significant institutions reporting the geographical breakdown of liabilities by residence of the counterparty. At June 2025 the assets of banks reporting this information represented 97% of the assets of all significant institutions.

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to those used in this analysis, BIS statistics[44] serve as the basis for an international comparison of Spanish banks' exposure. According to these data, the Spanish banking sector's exposure to NBFIs is relatively low within the EU, standing at the 38th percentile in terms of assets and the 31st percentile in terms of liabilities.

44 BIS Locational Statistics, which include non-consolidated data on both local positions in the banks' country of residence and their cross-border activity.

Box 3.1

TRADE TENSIONS AND SECTORAL EXPOSURES IN MATERIAL THIRD COUNTRIES FOR SPANISH BANKS

This box analyses the degree of exposure of Spanish banks' portfolio of lending abroad to the adverse but limited economic effects of the tightening of US tariff policy to date.[1]

As part of its trade policy, in April the new US Administration announced a widespread hike to its tariffs on goods imports from the rest of the world, setting a minimum of 10%, with higher levels for a large number of countries. The United States has since signed bilateral trade agreements with various major economies (Japan, the European Union (EU) and the United Kingdom), while new specific tariffs on strategic sectors have been adopted.[2]

These measures have resulted in a broad-based rise in average effective tariffs for most countries.[3] Overall, these changes place the average effective tariff for US imports at around 20.5%, the highest level since 1936 and 18 pp above the December 2024 level. At the same time, the trade agreements signed by the US Administration have afforded it greater access to its main trade partners' markets, keeping the tariffs applied to US products at 2024 levels or lowering them to zero.[4] All this would indicate that the impact of the change in US trade policy will vary not just by jurisdiction, but also by sector, and depend on the tariff implemented, its reciprocity and the sector's degree of integration within the world trade framework.

Spanish banks have a very considerable international presence, with almost half of their lending to firms and households abroad.[5] Therefore, trade tensions could potentially affect them through a deterioration in the credit quality of their exposures in third countries.[6] From a macroprudential perspective, the most important countries – referred to as material – for Spanish banks are, in order: the United Kingdom, Mexico, the United States, Brazil, Türkiye, Chile, Peru and Colombia (Chart 1).[7] These economies account for 72% of the lending granted by Spanish banks to non-resident counterparties.

Tariffs in material third countries

Chart 2 shows the increase since end-2024 in effective tariffs imposed by the United States on material economies for Spanish banks. In the case of the United Kingdom and Mexico – a country whose trade is highly integrated with the United States – the existing or newly signed trade agreements with the United States have mitigated the tariff increases, which have amounted to between 6 pp and 9 pp.[8] The increase in Peru, Colombia and Chile has also been moderate (9 pp, 8 pp and 6 pp, respectively, from an effective tariff of 0%) due to their smaller trading relationship with the United States. Conversely, in Türkiye and Brazil the increases since December 2024 have been more pronounced: 20 pp (from 3%) and 29 pp (from 1%), respectively.

---

1 This box conducts a fine-grained analysis of the exposure to credit risk in third countries associated with the new tariff scenario, rather than measuring the full impact on Spanish banks' solvency stemming from the tariffs or, more broadly, from the macroeconomic scenario associated with the current geopolitical tensions. The latter type of analysis is addressed via stress tests, as detailed in Box 3.2 of this report. These tools are used to examine not only a scenario with the prevailing policies, but also a hypothetical adverse scenario of further tightening.

2 A hike of up to 50 percentage points (pp) on steel, copper, aluminium and their derivative products; of 25 pp on cars, heavy-duty trucks and auto parts; and of up to 50 pp on timber, lumber and their derivative products. In addition, the new US Administration announced a 100% tariff on certain brand-name or patented pharmaceutical products, unless the firms are developing productive capacity in the United States.

3 The effective tariff borne by each country depends on both the prevailing tariff rate and the sectoral composition of its exports, impacting economies differently.

4 The agreements also incorporate commitments to invest in the United States that make strategic sectors more attractive. For instance, the EU has agreed to €750 billion of energy investment up to 2028, alongside further private commitments in fields such as digitalisation, green technology and defence. The economic effects of these investment commitments are not reflected in the simulation included in this box.

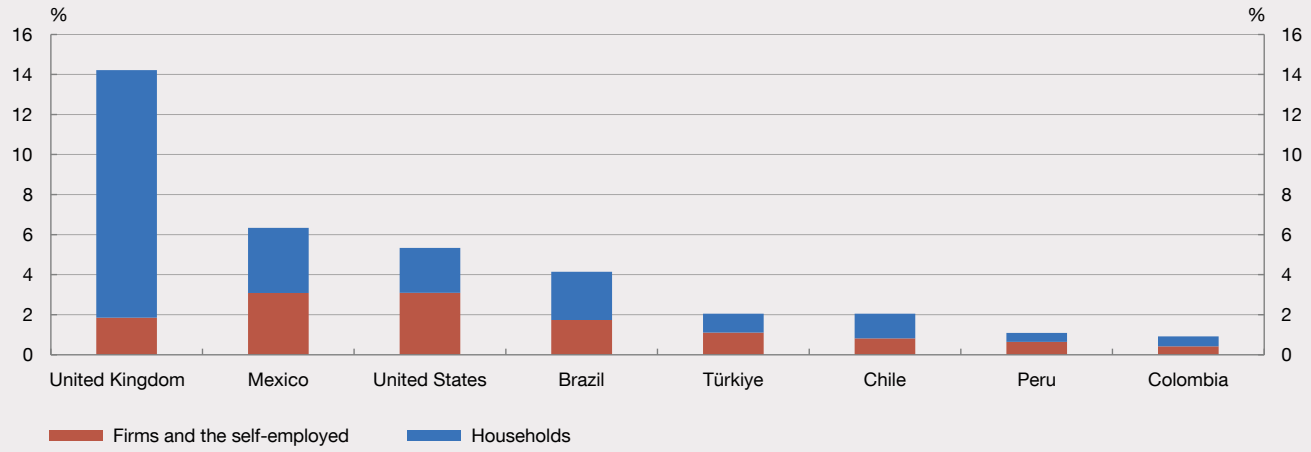
5 If the analysis is restricted to internationally active banks, the international exposure stands at close to 70% of all lending to households and firms.

6 As analysed in the *Annual Report 2024* of the Banco de España, a trade agreement such as that reached by the United States and the EU would have a very limited economic impact on Spain. This box therefore only analyses the international activity of Spanish banks.

7 Under macroprudential regulation, a country is deemed to be material when the credit exposures of Spanish banks to that country surpass a materiality threshold that could pose systemic risks to domestic financial stability. Metrics such as total exposure, risk-weighted assets and the credit quality of the loans in the country are used to calculate the threshold.

8 The US-UK deal, ratified on 16 June, raises the total tariff rate by 10 pp above its 2024 level, except for aerospace products, automobiles and automotive parts, on which a lower increase is imposed, while, in the case of steel and aluminium, it is raised by 25 pp, below the 50 pp imposed on other countries. In the case of Mexico, the products included in the United States-Mexico-Canada Agreement are exempt from the tariff hike. In February 2025 the United States set an additional tariff of 25% for other products. Negotiations are currently under way to cut this tariff to 12%, conditional upon the fulfilment of commitments in other areas.

Chart 1
Share of material third countries in total lending to households, firms and the self-employed. June 2025 (a)



SOURCE: Banco de España.

a The denominator includes the stock of loans, in all countries, including Spain, at consolidated level, to households, firms and the self-employed. These countries account for 23.4% of total lending to households and 12.8% of total lending to firms and the self-employed.

The differences in the size of these increases are largely attributable to the sectoral composition of each country's exports to the United States. For instance, Türkiye's trade exposure is high in the metal products and automotive sectors, among others, which are subject to elevated tariff rates. Mexico combines high exposure in the automotive sector with electronic and agrifood exports, which are subject to different rates, contributing to an intermediate increase. Chile and Colombia mainly export primary products such as minerals, coffee and flowers, many of which are exempt or have relatively low tariff rates.[9]

Sectoral impact of tariff hikes

A multi-country and multi-sector model called ONKIO[10] is used to analyse the impact of the higher tariffs on material third countries' aggregate and sectoral economic activity. For this exercise, the model divides the global economy into 12 geographical areas (the eight material third countries, Spain, the rest of the euro area, China and the rest of the world), each with a 24-sector sectoral structure.[11] The model's parameters are set on the basis of the input-output tables of each of the economies analysed.

The impact on activity in all countries is moderate (Chart 3).[12] The United Kingdom suffers the smallest impact in terms of activity, thanks to the above-mentioned tariff agreement, but also because its exposure to goods trade with the United States is relatively low. By contrast, Mexico and Brazil are the material third countries where activity contracts the most, albeit still moderately. In the case of the former, this larger impact than in other

9 In the case of Brazil, the increase has been widespread and very high (50 pp); as a result, the impact of the sectoral composition on the effective tariff is less relevant.

10 For more details, see P. Aguilar, R. Domínguez-Díaz, J.-E. Gallegos and J. Quintana. (2025). "The Transmission of Foreign Shocks in a Networked Economy", Documentos de Trabajo, Banco de España. Forthcoming.

11 The included sectors, defined according to the Spanish National Classification of Economic Activities (CNAE by its Spanish initials), are: agriculture, mining and quarrying, transportation and storage, construction, energy, water supply and sewerage, trade, food products, wood and paper products, refined petroleum products, chemicals and chemical products, pharmaceutical products, plastic products, basic metals, electronic products, machinery, motor vehicles, other manufacturing, real estate activities, professional services, financial services, hospitality, information service activities and other services. This matches the division of economic activities at section level in the CNAE, with manufacturing broken down at division level due to it potentially being harder hit by the tariff measures.

12 The impact on GDP is 1%-14% of the standard deviation of the GDP of these countries in the period 1980-2019.

Chart 2
Increase in effective bilateral tariff with the United States since December 2024

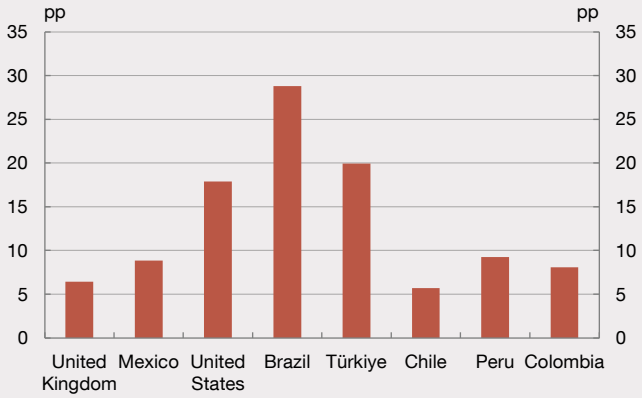
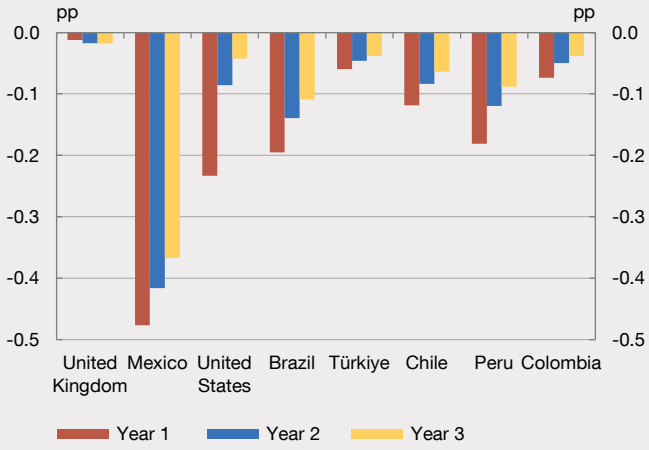


Chart 3
Impact on GDP of the increase in effective tariff (a)



SOURCE: Banco de España.

a Deviation in GDP from its steady state. The steady state is where all the variables of the model remain constant over time because all temporary fluctuations due to shocks have been eliminated.

countries is due to its high exposure to the United States,[13] while in the latter it is because of a sharp rise in its effective tariff. The impact on the other countries sits between these two extremes. Lastly, the impact on the United States is also relatively high as the costs of its imports increase significantly due to the higher tariffs.

At a disaggregated level, some sectors are particularly affected, such as basic metals, which experiences the steepest fall in activity in five of the eight countries analysed (all except for the United States, the United Kingdom and Chile), the manufacture of motor vehicles and mining and quarrying (Chart 4).

Characteristics of sectoral credit exposures in material third countries

Charts 5 and 6 show that there are marked cross-country differences in Spanish banks' sectoral credit exposures, in terms of both exposure and credit quality. No pre-existing vulnerabilities stemming from the highest non-performing loans (NPL) ratios being concentrated among the sectors accounting for the highest share of the total are detected in either corporate credit or lending to households.

Sectoral risk exposures

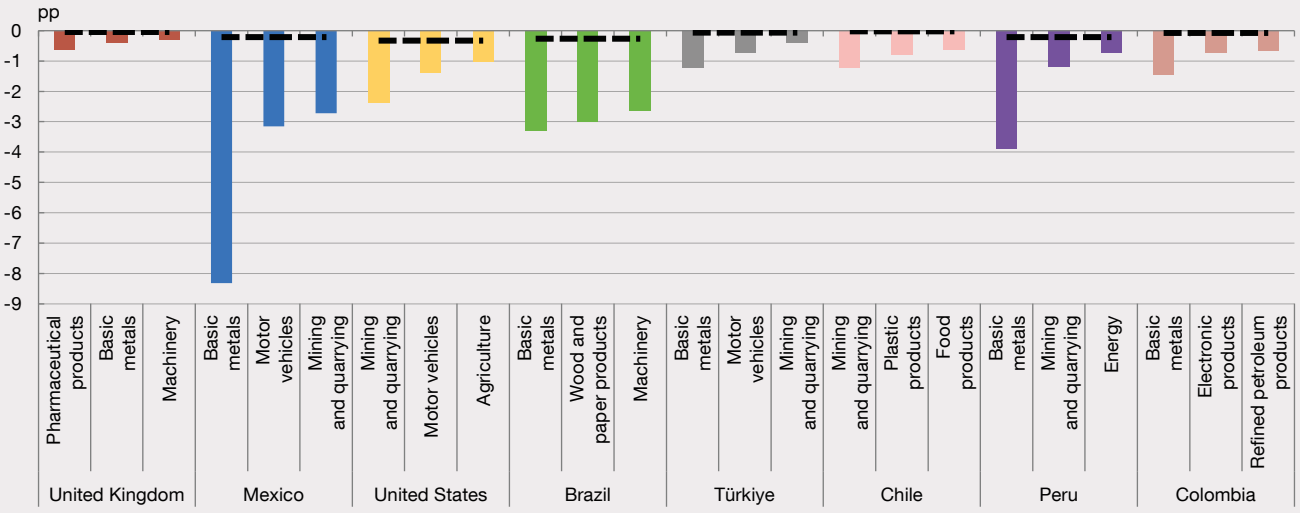
The exposure to the tariff shock that Spanish banks are contending with in their material international business can be proxied by combining the tariff impact at sector and material third country level and the credit exposure at the same level of granularity.

Chart 7 depicts the impact on sectoral gross value added (GVA) one year after the introduction of the tariffs and the credit exposure of Spanish banks, distinguishing between manufacturing and other business activities. This analysis shows that the manufacturing sectors of some countries where credit exposure is relatively limited are the hardest hit, while the impact is relatively moderate in those sectors and countries with greater exposure.

These sector level results suggest that the impact of the increases in effective tariffs is muted. However, the overall impact in each country is the result of aggregating all the sectoral impacts in that country. Thus, an accumulation of moderately sized impacts could result, once aggregated, in greater consequences for banks that are active in certain countries.

13 Mexico's exports to the United States account for around 50% of its GDP.

Chart 4
Impact on sectoral GVA of the higher tariffs (a)



SOURCE: Banco de España.

a Deviation in GVA from its steady state after the first year. The steady state is where all the variables of the model remain constant over time because all temporary fluctuations due to shocks have been eliminated. The broken line depicts the median impact on each country's sectors.

Chart 5
Relationship between Spanish banks' exposure and the NPL ratio of each sector in each country (a)

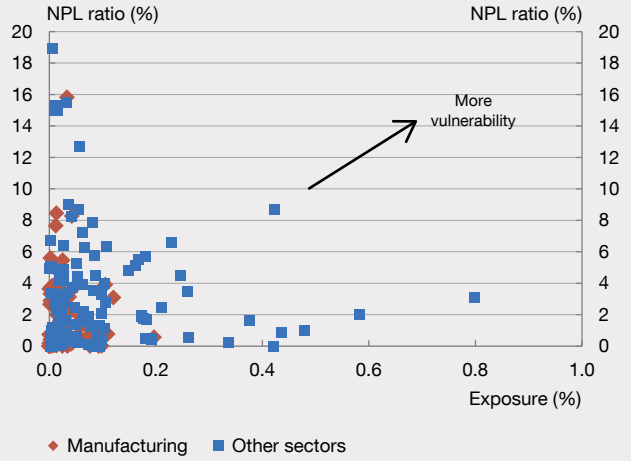
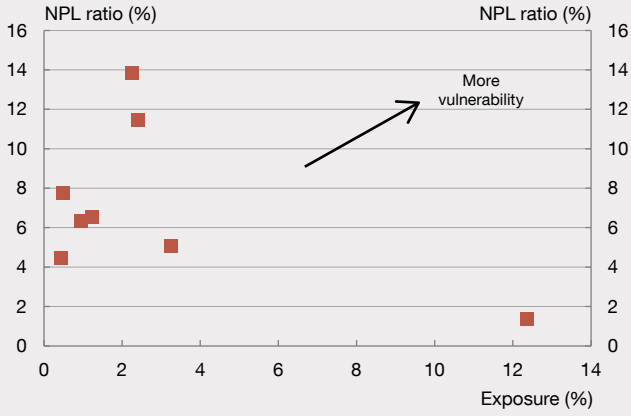


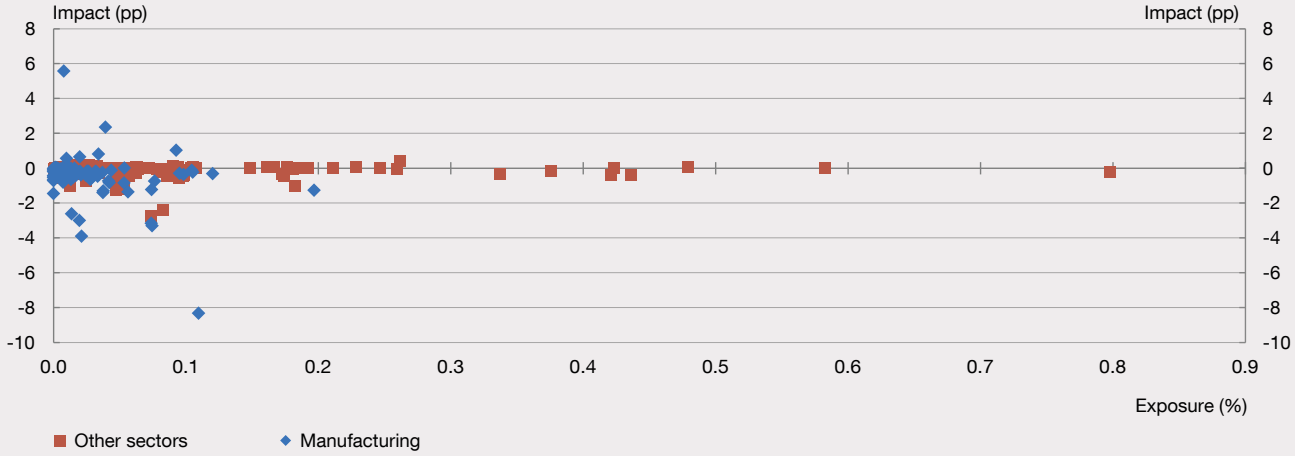
Chart 6
Relationship between Spanish banks' exposure and the household NPL ratio in each country (b)



SOURCE: Banco de España.

a Exposure is calculated as each sector/country as a percentage of total loans, in all countries, including Spain, at consolidated level, to households, firms and the self-employed. Two sectors with a low level of exposure but high NPL ratios are not depicted in the chart as doing so would distort its depiction. In both cases the level of exposure is below 0.03%.
b Exposure is calculated as the household sector in each country as a percentage of total loans, in all countries, including Spain, at consolidated level, to households, firms and the self-employed.

Chart 7
Relationship between Spanish banks' exposure and the impact of the tariff increase on the GVA of each sector in each country in one year (a)



SOURCE: Banco de España.

a Exposure is calculated as each sector/country as a percentage of total lending, in all countries, including Spain, at consolidated level, to households, firms and the self-employed.

Chart 8
Relationship between Spanish banks' corporate exposure and the impact of the tariff increase on the GVA of the corporate sectors of each country in one year (a) (b)

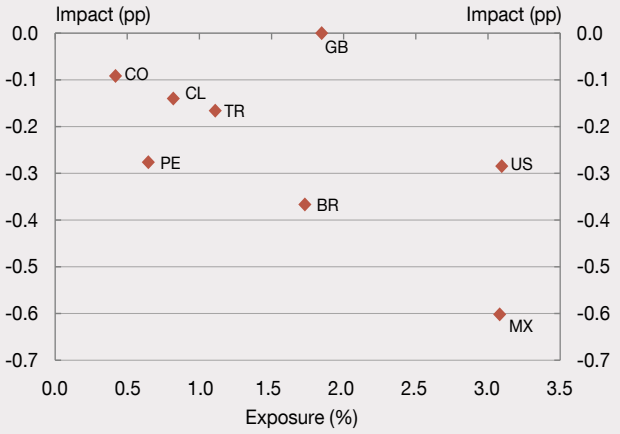
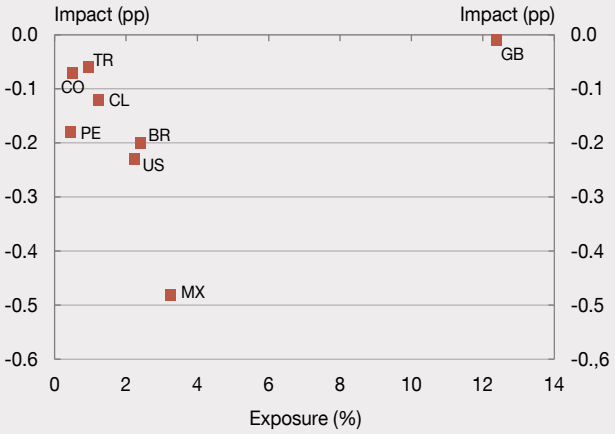


Chart 9
Relationship between Spanish banks' exposure to households and the impact of the tariff increase on each country's GDP in one year (c)



SOURCE: Banco de España.

a Exposure is calculated as each sector/country as a percentage of total lending, in all countries, including Spain, at consolidated level, to households, firms and the self-employed.
b For each country, the impact of the tariff increase on each sector's GVA has been multiplied by the percentage of Spanish banks' exposure to each sector in the country. The product is the weighted average of the impact in the country according to the sectoral distribution of Spanish banks' lending to firms in that country.
c Exposure is calculated as the household sector in each country as a percentage of total lending, in all countries, including Spain, at consolidated level, to households, firms and the self-employed.

Chart 8 depicts this analysis, which is based on an indicator that weights the impacts of the tariff shock on sectoral GVA by Spanish banks' exposure in that sector and country,[14] and shows that the impact at country level is also limited. This metric reveals that these exposures tend to be concentrated in relatively harder hit countries, such as Mexico, the United States and Brazil. However, the highest values both for exposures to the hardest hit countries (3%) and for the largest impacts (close to 0.5% in Mexico) are moderate.

In addition, given that trade tensions also impact household income, employment and consumption in the material third countries, Spanish banks could be affected by a reduction in households' ability to pay. To study this effect, Chart 9 compares, for each country, the impact on GDP – used as a proxy for the impact on gross disposable income – with its share in consolidated lending to households. In this case, in Mexico, the United States and Brazil the impact – albeit moderate – is relatively higher than in other countries and credit exposure is material. In the country with the highest exposure to households (the United Kingdom), the impact on this portfolio would be negligible.

Conclusions

In sum, the results show that the degree of geographical and sectoral diversification of Spanish banks in material third countries, and the very size of the economic impact of the tariffs already adopted, would curb the adverse effect of this policy on the lending business.[15]

14 Constructed as the average of the effects on each sector's GVA, weighted by its relative share of credit. As a result, a composite metric of the impact is obtained, based on the relative shares of the sectors in terms of their materiality for Spanish banks, and not in terms of their importance for each country's economy (which is reflected by the impact on GDP). This metric reveals that, in most countries, Spanish banks' credit exposures tend to be more concentrated among sectors more vulnerable to the effects of tariffs, compared with their share in terms of GVA.

15 This result is aligned with the information provided by the *Bank Lending Survey for 2025 Q3*, which, in the last two quarters, has asked Spanish banks about their perception of the effects of the higher tariffs. Respondent banks consider that the impact is proving very limited, although the majority of banks say they are stepping up their monitoring of the potentially hardest hit sectors and firms, such as exporters and firms with business in the United States. They also do not expect the higher tariffs to have a significant impact in the coming months.

Box 3.2

FORWARD-LOOKING ASSESSMENT OF THE SPANISH BANKING SYSTEM'S RESILIENCE

This box presents the stress tests conducted by the Banco de España to assess the Spanish banking system's resilience to the hypothetical materialisation of risk scenarios. In line with past assessments, the Forward-Looking Exercise on Spanish Banks (FLESB) methodology was used. The FLESB, developed and implemented centrally by the Banco de España, uses highly granular data and a top-down approach.[1]

Following the usual practice in these exercises, the FLESB has been used to evaluate the baseline and adverse scenarios of the latest EU-wide stress test coordinated by the European Banking Authority (EBA).[2] This adverse scenario envisages geopolitical risks that reduce economic activity and drive inflation, leading to a significant tightening of financial conditions.

In light of the current heightened uncertainty, it is valuable from the macroprudential perspective to complement the EBA adverse scenario with alternative hypothetical scenarios that capture other dimensions of systemic risk. Considering various hypothetical adverse scenarios allows for a more comprehensive assessment of the potential transmission channels associated with those scenarios, and therefore of the banking sector's resilience.

Accordingly, this box also presents the results of a hypothetical adverse scenario developed by the Banco de España, consistent with the risks identified in Chapter 5. This scenario is characterised by a deflationary environment and a persistent contraction in euro area economic activity (over a five-year horizon), linked to the fiscal vulnerabilities identified in advanced economies. This stands in contrast to the inflationary scenario and shorter three-year horizon envisaged in the EBA stress test. The Banco de España scenario also includes assumptions that reflect a potential escalation in trade tensions and a deterioration in financial markets amid the uncertainty associated with this environment.[3]

As in previous *Financial Stability Reports* (FSRs), the dynamic balance sheet assumption is applied, meaning that both the size of banks' balance sheets and the relative share of the various portfolios change depending on the scenarios.[4]

The EU-wide stress test scenarios

The baseline scenario of the EBA's 2025 stress test reflects the December 2024 Eurosystem staff macroeconomic projections.[5] Meanwhile, the adverse scenario captures the key risks to financial stability identified by the European Systemic Risk Board and the European Central Bank (ECB) at end-2024.[6]

In particular, the adverse scenario envisages a sharp escalation of geopolitical tensions (in their different dimensions), leading to the fragmentation of global supply chains and higher energy prices. This results in a negative supply shock with strong inflationary effects (Chart 1). Over the exercise horizon, the higher inflationary pressures drive up average short-term reference interest rates (Chart 2).

Euro area GDP is drastically reduced by the combined effect of trade fragmentation and a loss of confidence caused by the geopolitical uncertainty. Contrasting with the growth seen in the baseline scenario, in the adverse scenario GDP contracts by a cumulative 6.2%. In the case of Spain, which has higher initial growth projections in the baseline scenario than the broader euro area, the cumulative GDP contraction is limited to 4.1% (Chart 3).

Despite the initial inflationary shock, the disinflationary impact of depressed aggregate demand dominates from 2026, bringing inflation down towards its target of 2% in 2027 (Chart 1). Spain's inflation path is very similar to that of the euro area overall under both the baseline and adverse scenarios.

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1 As a top-down methodology, the FLESB applies the same scenarios, assumptions and models consistently across all of the banks analysed. Its key features were described in the November 2013 *Financial Stability Report* (FSR). As a dynamic framework in constant evolution, its main improvements and developments have been documented in subsequent editions of the FSR and other Banco de España publications.

2 This exercise was conducted in 2025 and the results published in August. For more details, see the information published by the EBA on the latest EU-wide stress test.

3 These two elements – the trade tensions in particular – are qualitative aspects common to both scenarios.

4 Loan portfolio dynamics depend on the credit growth projected in each macroeconomic scenario. This affects both the volume of performing loans (which generate income) and the growth of risk-weighted assets. Under economic downturn scenarios, declines in lending to the non-financial private sector are projected across different portfolios and countries of exposure.

5 See the information on the ECB's macroeconomic projections for more details.

6 For further details, see the macro-financial scenario for the EBA's latest EU-wide stress test.

Chart 1
Inflation scenarios in the euro area

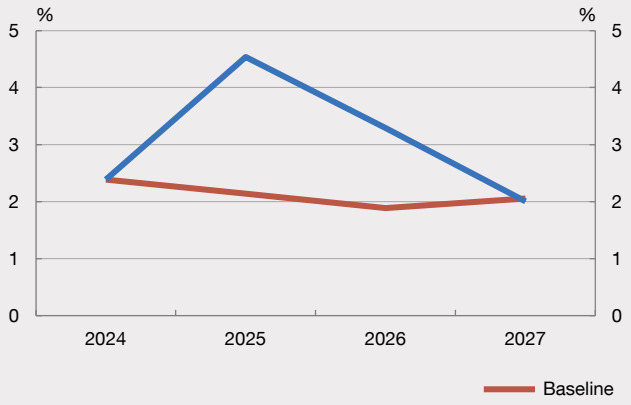


Chart 2
Short-term interest rate scenarios in the euro area (a)

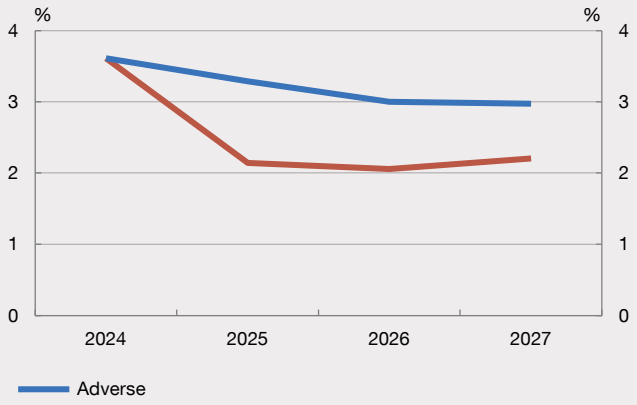


Chart 3
Real GDP scenarios in Spain and the euro area

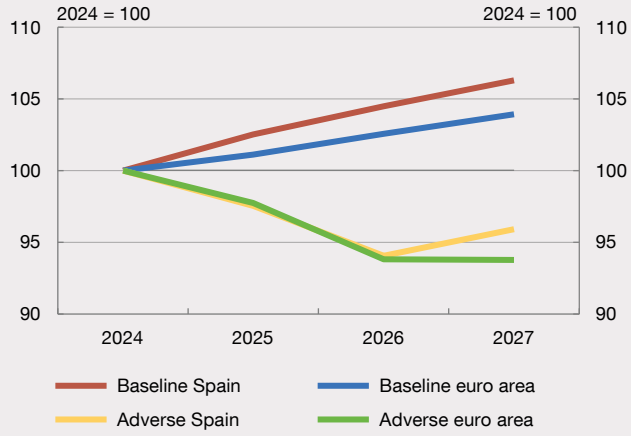
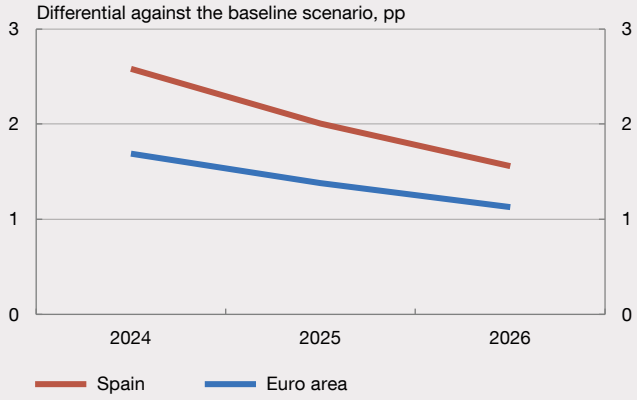


Chart 4
Long-term interest rate scenarios in Spain and the euro area (a)



SOURCES: Banco de España.

a The short-term rate paths are for the 3-month EURIBOR.

The initial geopolitical shock also triggers a sharp and broad-based drop in risky asset valuations across financial markets and in real estate prices. The subsequent tighter financing conditions then exert a further drag on EU firms' investments and households' consumption, contributing to the GDP contraction.

In this environment, the markets adopt a more negative view of the existing fiscal weaknesses, leading to higher sovereign risk premia. In Spain, long-term rates initially diverge from the baseline scenario by 2.5 pp, exceeding the deviation for the euro area as a whole. This increase fades partially over the 2025-27 horizon (Chart 4).

Chart 5 shows the average differences between the baseline and adverse scenarios for Spain's key macro-financial variables. Also worth noting is the sharp contraction in Spain's house prices in the adverse scenario.

Given the global nature of the geopolitical shocks envisaged, the adverse international macroeconomic environment is not confined to Europe. In the case of non-EU countries that are material for Spanish banks, the adverse scenario generally entails a shift into a recessionary landscape with higher average inflation (Chart 6). As in the euro area, rising inflation pushes short-term interest rates higher, which – together with greater

Chart 5
Macroeconomic scenarios in Spain

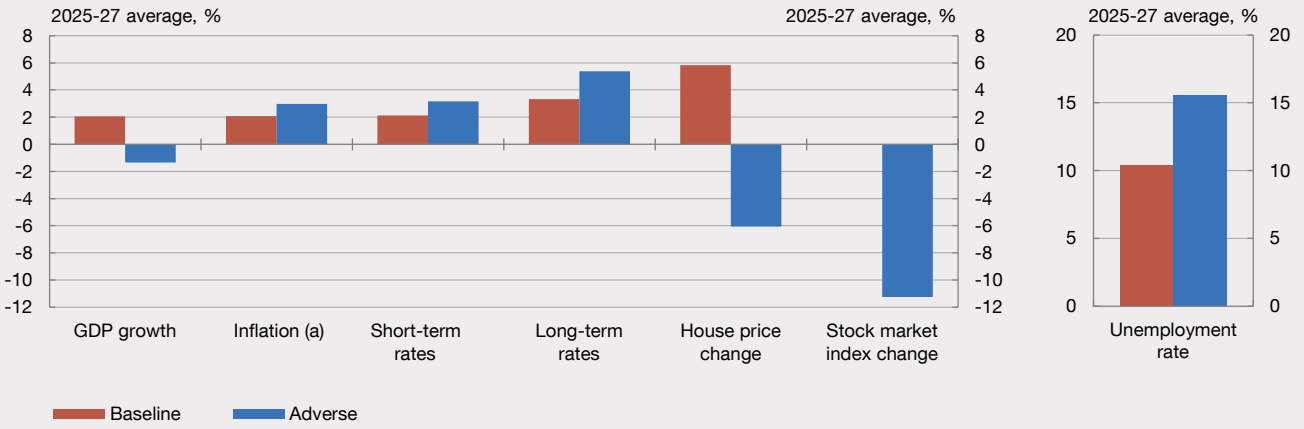


Chart 6
Real GDP growth and inflation under the baseline and adverse scenarios, distribution by country. 2025-27 average (a) (b)

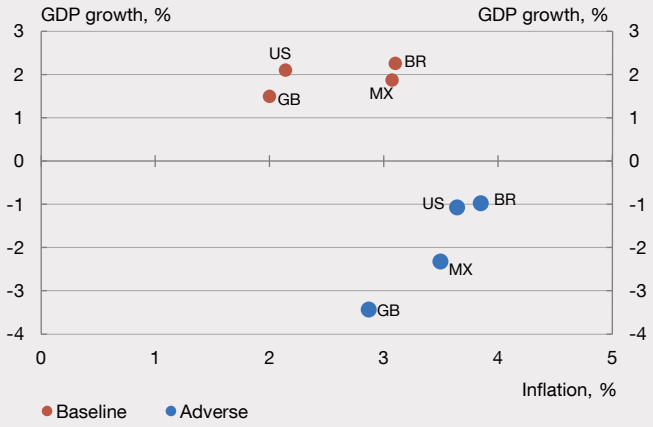
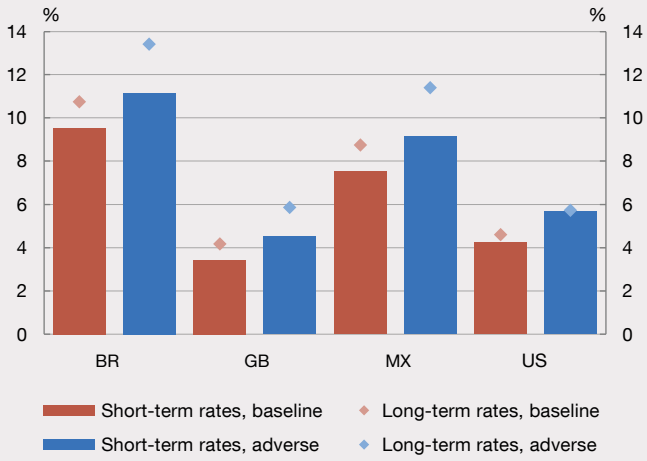


Chart 7
Short and long-term rates under the baseline and adverse scenarios, by country. 2025-27 average (c)



SOURCE: Banco de España.

a Inflation is calculated based on the harmonised index of consumer prices (HICP).
b Türkiye has values that fall outside the range of the chart: average inflation is 19% in the baseline scenario and 20% in the adverse scenario; GDP growth is 3.1% in the baseline scenario and -2.2% in the adverse scenario.
c Türkiye has values that fall outside the range of the chart: short-term rates are 33% in the baseline scenario and 36% in the adverse scenario; long-term rates are 24% in the baseline scenario and 26% in the adverse scenario.

risk aversion in financial markets – drives up costs for long-term government debt (Chart 7).

The solvency of the Spanish banking sector

This section examines how the adverse scenario would impact Spanish banks' solvency, as measured by the fully loaded[7] CET1 capital ratio.

For the capital position (the numerator of the ratio), the negative impacts stem essentially from (i) higher credit impairment charges and a reduction in the value of banks' other assets, such as fixed-income portfolios (particularly government debt) and foreclosed assets, and (ii) lower profit generation in Spain and abroad. Conversely, there are some mitigating effects that have a positive impact on capital, such as lower tax payments and profit

7 The term "fully loaded" means the ratio is calculated excluding transitional arrangements.

Chart 8
Net impact on CET1 ratio through different channels (a)

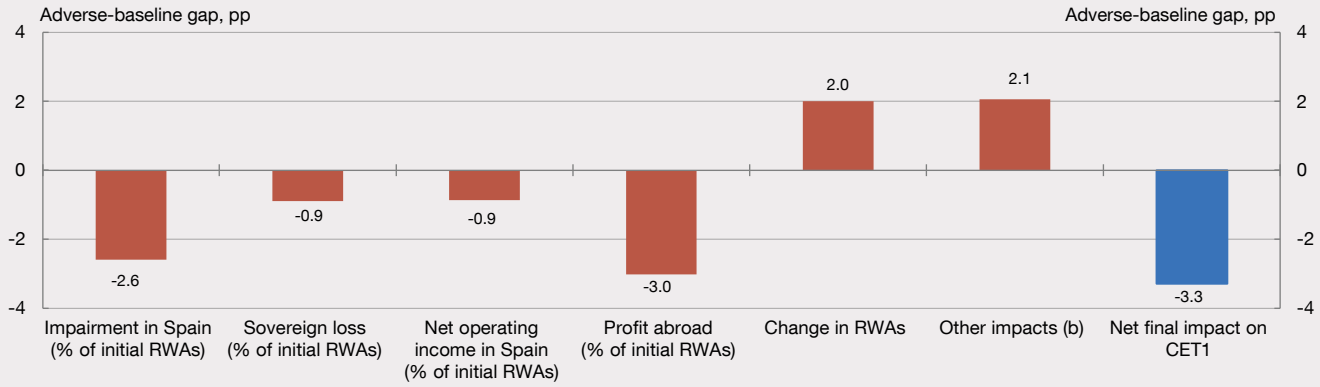


Chart 9
Profit after tax

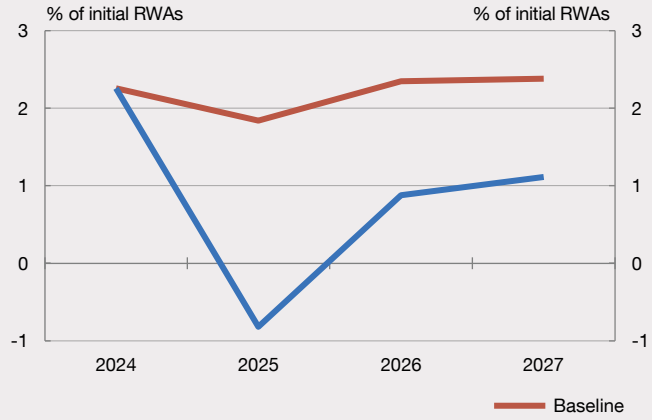
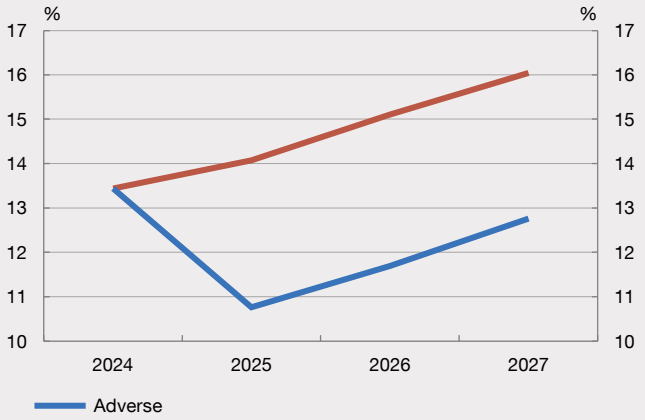


Chart 10
CET 1 ratio



SOURCE: Banco de España.

a The impacts refer to changes in the CET1 ratio projected for 2027 and in financial flows projected for 2025–27 (e.g. capital generation) stemming from the difference in macro-financial conditions between the adverse and baseline scenarios.
b Other consolidated gains and losses, tax effects, exchange rate effects, profit distribution and coverage of losses on ICO-backed loans (guaranteed by the Government).

distribution, as well as the ICO public guarantee programme.[8]

Meanwhile, changes in risk-weighted assets (RWAs) – the ratio's denominator – tend to contribute positively to the solvency ratio in contractionary macroeconomic environments, due to the reduction in banks' balance sheets and, in particular, lending.

Chart 8 shows, for the aggregate of the banks analysed, the cumulative impacts on the solvency ratio over the adverse scenario horizon.[9] These impacts are presented as differences relative to the baseline scenario.

In Spain, the larger credit impairment losses reduce the CET1 ratio by 2.6 pp compared with the baseline scenario (normalised relative to initial RWAs). These

8 The ICO public guarantee programmes were introduced in response to the COVID-19 pandemic and protect banks against defaults by borrower firms. The average impact is calculated between two hypothetical extremes: a lower bound where the expected loss on guaranteed loans is equal to the corporate portfolio average, and an upper bound where guaranteed loans are concentrated among riskier debtors.

9 The banks analysed include all of the significant institutions supervised by the Single Supervisory Mechanism and less significant institutions under the direct supervision of the Banco de España.

losses are compounded by impairments in the consolidated group's sovereign bond portfolio and lower net operating income in Spain (due to lower business volumes, which more than offset the higher interest rates). Meanwhile, lower net profit abroad has a negative impact, reducing solvency by 3 pp compared with the baseline scenario.[10]

The reduction in RWAs makes a positive contribution (2 pp versus the baseline scenario). Other impacts (exchange rate fluctuations, lower profit distribution, a reduced tax burden and ICO guarantees) also contribute positively (a further 2.1 pp compared with the baseline scenario). Overall, the net effect of the above impacts is to reduce the aggregate CET1 ratio at the end of the horizon by 3.3 pp compared with the baseline scenario.

Strong profitability and CET1 ratios – both initially and under the baseline projections – mean that, despite this significant 3.3 pp gap between the baseline and adverse scenarios, the CET1 ratio remains relatively high at the end of the adverse scenarios.

Charts 9 and 10 show developments in profit after tax (combining business in Spain and abroad) and the CET1 ratio over the three-year horizon for the banks as a whole. Under the baseline scenario, profit holds at between 1.8% and 2.4% of RWAs, while the CET1 ratio rises steadily to 16% in 2027[11] (up by 2.6 pp on 2024).

Under the adverse scenario, the abrupt change in expected losses (due to the shift from a growth scenario to one of severe macro-financial deterioration) leads to a sharp increase in provisions and a marked drop in profits in the first year, driving the CET1 ratio down to 10.8% in 2025[12] compared with 13.4% observed in 2024.

However, over the rest of the projection horizon the solvency ratio follows an upward trajectory. This owes to the return to positive profits – albeit significantly lower than under the baseline scenario – and the reduction in RWAs. Overall, the aggregate CET1 ratio holds at relatively high levels (12.8%) and above minimum requirements.

Chart 11 shows the stress test results disaggregated by groups of banks. The groups are as follows: (i) significant institutions supervised by the Single Supervisory Mechanism (SSM) with considerable international activity (the "International group");[13] (ii) other significant institutions directly supervised by the SSM (the "Other SSM group"); and (iii) an aggregate of smaller banks directly supervised by the Banco de España without significant international activity, referred to as less significant institutions or LSIs (the "LSI group").

By the end of the baseline scenario horizon all bank groups have higher capital levels than in 2024.

Under the adverse scenario the solvency ratio for both groups of significant banks (International and Other SSM) falls in the first year (2025) and gradually recovers over the rest of the horizon. Although CET1 ratios do not return to their initial level, they remain relatively high and above the regulatory minimums. The LSI group is the most resilient, with a low of 22.2% and a final solvency ratio of almost 26%. Chart 12 breaks down the factors behind these changes for the various groups of banks.

These results are better than those obtained in the previous stress tests conducted by the Banco de España.[14] This owes, first, to the better starting position from which the Spanish banking sector enters the hypothetical adverse scenario. Thus, the CET1 ratio has grown (by +0.4 pp on aggregate in fully loaded terms, relative to 2023) and Spain's credit risk metrics have improved (as reflected at aggregate level in lower non-performing and stage 2 ratios) (see Chart 3.8 in Chapter 3).

10 Profit abroad is grouped as a single concept, while the impacts in Spain are divided into different channels. For instance, the combined negative effect of credit impairment and lower net operating income in Spain is 3.5 pp. The profits recorded in business abroad provide some resilience and diversification, helping to underpin the aggregate CET1 ratio.

11 As an additional exercise, results were also obtained for a more up-to-date baseline scenario based on the September 2025 macroeconomic projections. These projections envisage a very similar performance in activity to that expected in winter 2024, with the CET1 ratio virtually unaffected compared with the results presented here.

12 At aggregate level, the drop in the CET1 ratio in the first year under the adverse scenario stems not only from the net loss, but also from the direct impact of losses in sovereign bonds at fair value and from profit distribution (as, despite the aggregate net loss, some banks do turn a profit).

13 This group includes the three banks with the most significant and longest-standing international activity.

14 See Box 2.1 of the Autumn 2024 FSR.

Chart 11
Initial, final (2027) and minimum CET1 ratios under the EBA scenarios

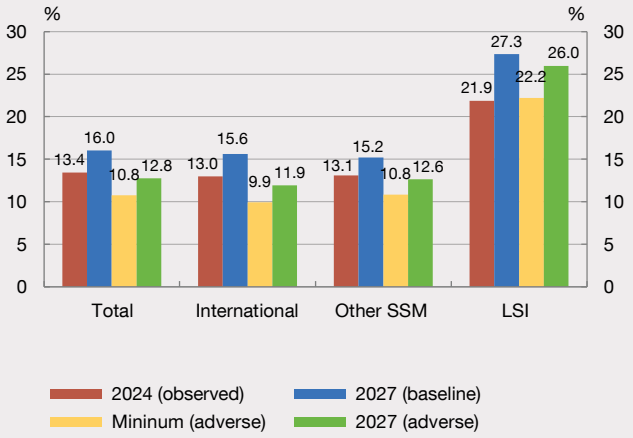
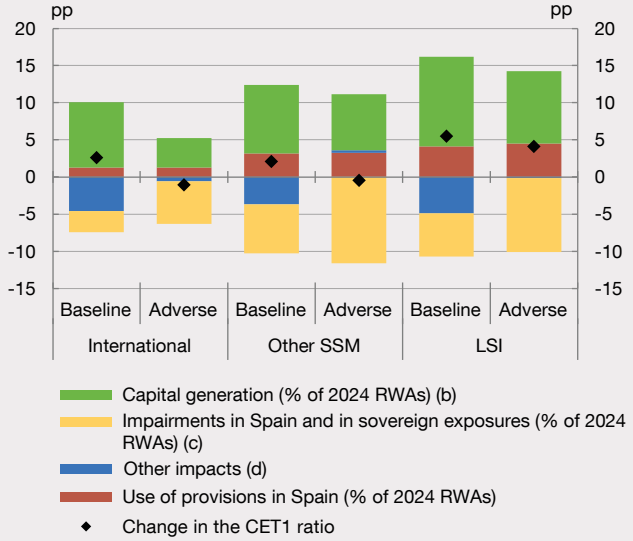


Chart 12
Impact of the risk materialisation scenarios on banks' solvency (a)



SOURCE: Banco de España.

a Impacts are defined as the changes in the CET1 ratio projected for 2027 and in financial flows projected for 2025–27 (e.g. capital generation) stemming from the difference in macro-financial conditions between the adverse and baseline scenarios.
b The generation of loss-absorbing capital is determined by net operating income in Spain and by the net profit/loss generated abroad for banks with significant international activity.
c Impairment losses on loans and foreclosed assets in operations in Spain and impact on capital of the potential impairment of sovereign exposures at consolidated level.
d Other consolidated gains and losses, tax effects, exchange rate effects, profit distribution, coverage of losses on ICO-backed loans (guaranteed by the Government) and changes in RWAs.

Moreover, although the scenario narratives are comparable, the more favourable macroeconomic performance and outlook since 2023 also provide a better starting point in this dimension of the exercise.

Results of the EU-wide stress test published by the EBA

The Spanish banking system's resilience to the EBA scenario was assessed using the FLESB methodology, yielding results consistent with those published by the EBA calculated using its own methodology. Both the FLESB and the EBA results suggest that the European banking system is highly resilient to a severe adverse scenario (Chart 13). The Spanish banks participating in this exercise[15] have initial capital levels below the EU average, but lower capital consumption (179 bp).

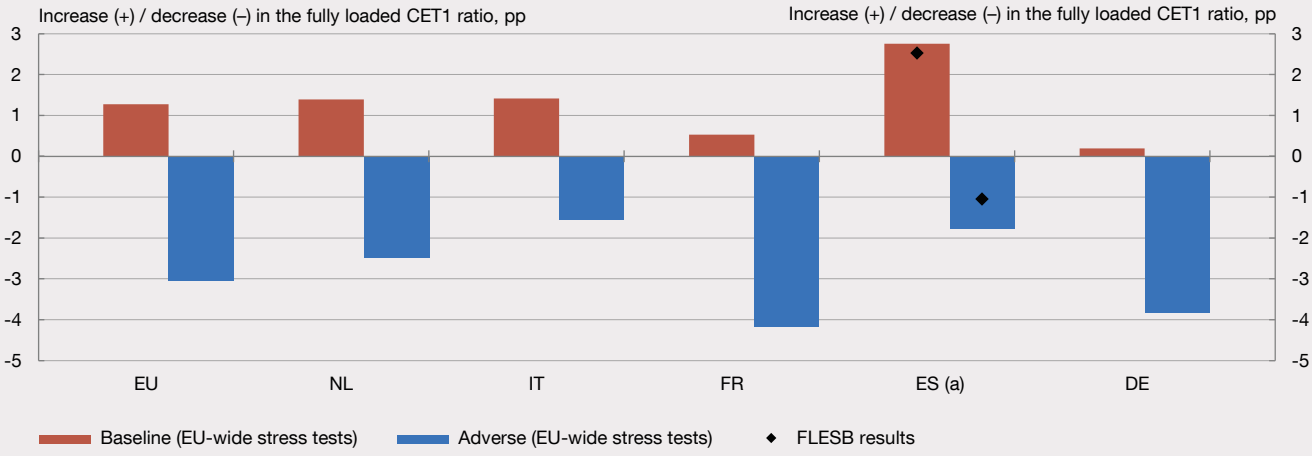
Alternative stress test with a five-year deflationary scenario

As explained above, in the current highly uncertain context, analysing the Spanish banking system's resilience considering a wide range of shocks and transmission channels is very useful from a macroprudential standpoint. Accordingly, the Banco de España is working to broaden its macroprudential stress tests by analysing a wider range of hypothetical scenarios that reflect different sources of systemic risk.

A case in point is the adverse hypothetical scenario presented below as an alternative to that coordinated by the EBA. This scenario considers two of the main sources of risk in the current environment: fiscal weaknesses having a greater impact on sovereign bond markets in the

15 BBVA, Banco Sabadell, Banco Santander, Bankinter, CaixaBank and Unicaja Banco. This exercise includes fewer banks than the FLESB exercise.

Chart 13
Results after three years of the EU-wide and FLESB stress tests



SOURCE: Banco de España.

a The results of the EU-wide stress test for Spain are for the aggregate of BBVA, Banco Sabadell, Banco Santander, Bankinter, CaixaBank and Unicaja Banco. The diamonds depict the FLESB results under the same scenarios as in the EU-wide exercise and for the same six banks on aggregate to enable comparison, even though the FLESB exercise includes additional institutions.

EU and other advanced economies and a potential escalation of global trade tensions (Chapter 5).

In particular, the scenario envisages a combination of (i) an EU sovereign debt crisis triggered by fiscal turmoil in France and a loss of confidence in US fiscal policy,[16] and (ii) an escalation in global trade tensions. This hypothetical scenario entails a marked increase in the risk premia demanded by investors across different asset classes, giving rise to a prolonged economic downturn, a sharp increase in unemployment and a deflationary environment.

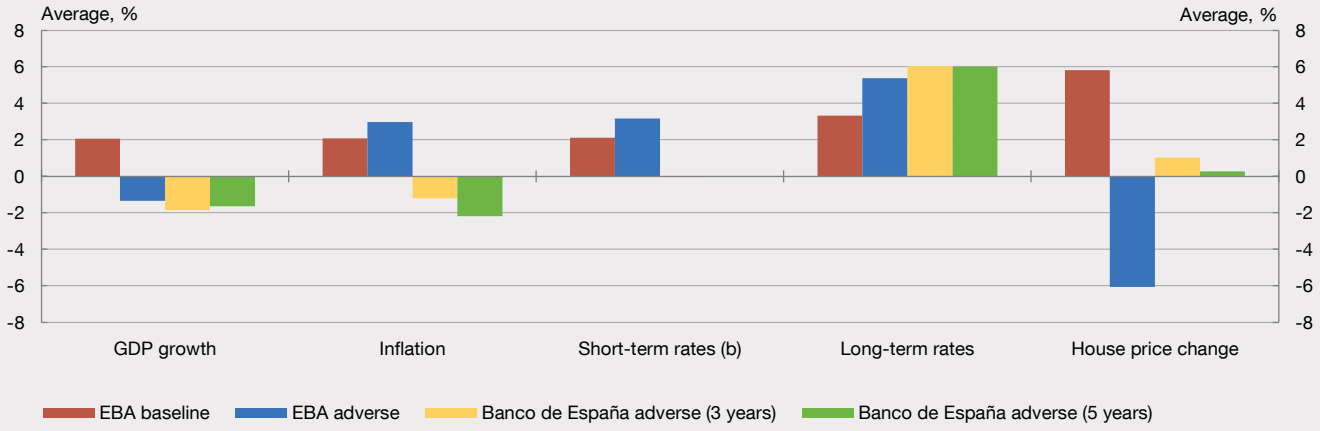
In contrast to the inflationary scenario considered in the EBA exercise, this alternative stress case involves a deflationary scenario in which the ECB responds to the fall in activity and inflation by lowering its key policy rates; however, amid high risk premia, fiscal policy is forced to act procyclically through a fiscal adjustment, which further deepens the drop in aggregate demand.

In this exercise the projection horizon has been extended to five years (rather than the usual three) to explore the implications of prolonged adverse scenarios. The aim is to assess a hypothetical situation in which the potential materialisation of risks linked to geopolitical factors or government debt could trigger persistent shocks.

Chart 14 compares the average values of Spain's main macro-financial variables under the EBA's baseline and adverse scenarios and under this alternative scenario designed by the Banco de España. In terms of GDP growth, the deflationary scenario is somewhat more severe, particularly over the three-year horizon, though the difference remains limited. By their very design, the scenarios follow completely different inflation paths, with price growth exceeding 2% on average in the EBA scenario and negative inflation rates below -2% in the Banco de España scenario. This is also reflected in the marked differences in the ECB's monetary policy response. Thus, short-term interest rates stand at 3% under the EBA scenario compared with approximately 0% under the Banco de España scenario. However, long-term government debt yields stand at similar levels in both scenarios, since risk premia rise more sharply in the

16 In the case of the EU fiscal crisis, the adverse shocks would significantly strain the fiscal equilibrium between revenue and expenditure in several Member States. The assumptions for the United States are less severe: no short-term pressures are considered on the deficit but investor confidence is assumed to decline slightly due to concerns about the medium and long-term implications of high debt levels.

Chart 14
Macroeconomic scenarios for Spain (a)



SOURCE: Banco de España.

a For the EBA's EU-wide scenarios, the chart shows the average values for the entire horizon (three years). For the Banco de España's adverse scenario, the chart shows the average up to year 3 (green bars) and up to year 5 (yellow bars).
b The short-term rate paths are for the 3-month EURIBOR.

Banco de España scenario, offsetting the lower risk-free interest rate.

House price dynamics also differ between both scenarios. The EBA considers price dynamics consistent with those during the global financial crisis (GFC). The Banco de España scenario does not include such a sharp adjustment, given that the level of risk identified in the real estate market is lower than in the pre-GFC period (see Section 4.1 of the main text).

Chart 15 shows how the aggregate CET1 ratio for all the banks considered changes between 2024 and 2029 under the Banco de España adverse scenario. The CET1 ratio drops to 12.5% in the first year of the exercise,[17] down from 13.4% in 2024. However, it then follows a rising trajectory over the remainder of the projection horizon, reaching 14.9% in 2029, driven by modest but positive earnings and a lack of significant growth in banks' balance sheets. Over the three-year horizon (aligned with the EBA horizon) the CET1 ratio under the Banco de España's adverse scenario is more than 2 pp lower than under the EBA baseline scenario. However, this gap is smaller than between the two EBA scenarios.

Chart 16 shows the starting points and results for the various groups of banks under the Banco de España scenario. All bank groups have a higher capital level at the end of the horizon than in 2024, although the results differ depending on their starting position and business model. The International group has an initial CET1 ratio of 13.0% in 2024 and reaches a level of 14.4% at the end of the horizon, while the ratio for the Other SSM group starts at 13.1% and climbs to 13.7%. The LSI group has the highest initial CET1 ratio, which further improves to 27.2%.

Conclusions

The results indicate that the banking system would be able to absorb the losses caused by a hypothetical scenario like the one envisaged by the EBA in its EU-wide stress test this year (characterised by a severe recession and a surge in inflationary pressures, associated with an extreme scenario of geopolitical risk materialisation). These shocks would worsen agents' ability to pay, raising impairment provisions and dampening banks' business growth, which would result in limited profitability over the exercise horizon. Under this adverse scenario losses are particularly

17 The aggregate CET1 ratio drops in the first year under the adverse scenario, despite no net loss. This owes to the direct impact of losses in sovereign bonds at fair value underlying this metric, as well as to profit distribution (although the aggregate figure is zero, some banks do make a profit).

Chart 15
CET1 ratio

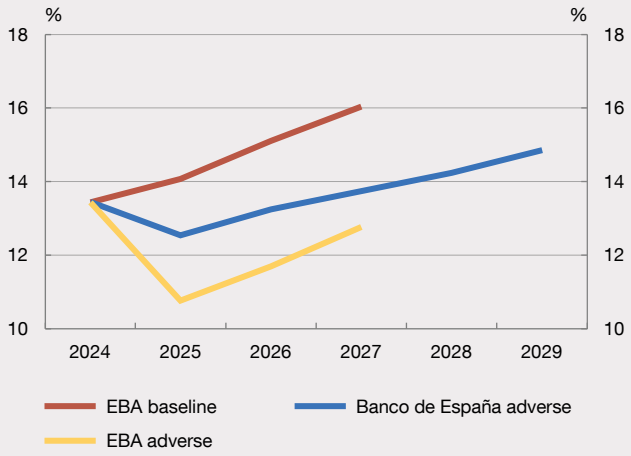
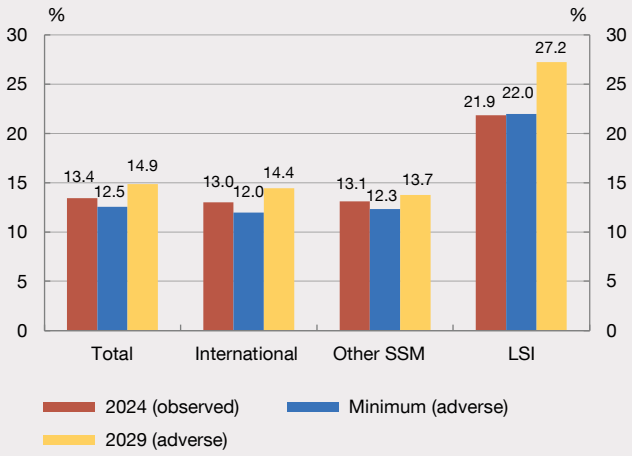


Chart 16
Initial, final (2029) and minimum CET1 ratio under the Banco de España adverse scenario



SOURCE: Banco de España.

marked at the outset, due to the abrupt reversal of expectations. Over the two subsequent years banks manage to regain part of their initial solvency thanks to balance sheet downsizing and weak but positive profitability. However, the final aggregate CET1 ratio is substantially lower than in the baseline scenario and somewhat below its initial level.

The estimated impacts on solvency are smaller if the economic contraction is combined with a deflationary environment in which the monetary policy response leads to a lower short-term interest rate path. In this alternative scenario, lower interest rates reduce defaults and increase the value of real estate collateral, mitigating losses. This positive effect outweighs the negative effect on net interest income. The stronger resilience persists even when considering a five-year horizon – longer than typically used in stress test exercises – during which the recessionary dynamics continue.

Overall, the analyses confirm that the banking sector's starting position is relatively resilient and – under the baseline scenario – can be strengthened in the coming years. However, these results should be viewed with some caution, due to both these exercises' inherent uncertainty and the general uncertainty associated with the current macro-financial environment. The latter warrants particularly close monitoring for any signs of potential new risk scenarios.

Although the scenarios envisage very severe impacts on the various macro-financial variables, comparable to those seen during the GFC, the tests indicate that banks' solvency would not deteriorate to the levels observed during that period.

It is worth noting that the real estate sector no longer makes up an excessive share of banks' balance sheets. For example, in 2008 loans for property development and housing construction accounted for half of the corporate loan portfolio, whereas today the proportion is under 15%. More generally, real estate credit today represents a small fraction of GDP and of total bank credit, and there are no signs of the extreme dynamics that preceded the GFC (see Section 4.1.2). Mortgage lending standards are at significantly more prudent levels than in the years leading up to the crisis (see Section 4.1.2), tempering both the rise in default rates under adverse scenarios and the expected loss given default.

All of the above entail a lower sensitivity of Spanish banks' solvency to the materialisation of different risk scenarios. However, their greater capacity to absorb these impacts is equally important. Capital ratios are currently significantly higher than in the years leading up to the GFC. In 2007 the aggregate Tier 1 capital ratio (which was the highest quality of regulatory capital considered by supervisors before the GFC) for the banks analysed stood below 8%, while today it stands near 15%, almost double that level (in fully loaded terms).

4

MARKETS AND ASSET PRICES

Figure 4.1
Markets and asset prices (a)

SOURCE: Banco de España.

a The green (red) shields denote the circumstances of the financial position of each market that constitute strengths (vulnerabilities) should risks materialise. The strengths (vulnerabilities) reduce (increase) the likelihood of occurrence and/or the impact of the risks to financial stability.

4.1 The real estate market

4.1.1 Prices and activity

House purchases reached high levels in 2025 H1, but showed signs of a slowdown. In June 2025 house purchases totalled 745,000 units in cumulative 12-month terms, a similar figure to that observed at the end of 2008 Q1 (Chart 4.1.a).[1] However, this represented a year-on-year increase of 3.1% in 2025 Q2, significantly below the rates of 14% observed in 2025 Q1 and 20% in 2024 Q4. Second-hand housing continued to dominate, accounting for nearly 90% of all house purchases.[2]

The pace of house price growth quickened. In nominal terms, house prices climbed at an annual average rate of 12.5% in 2025 H1, compared with 4% and 8.4% on average in 2023 and

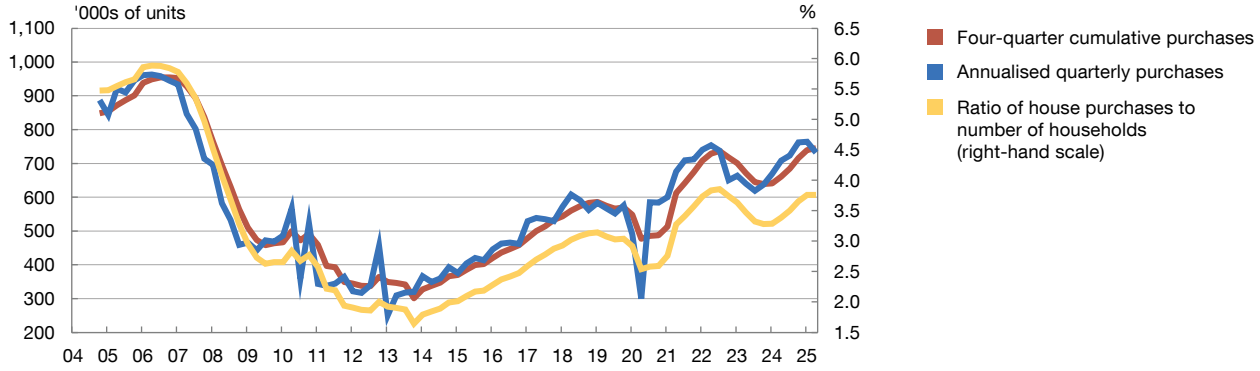
1 The similarity in terms of house purchases between these two dates lessens when population growth is considered, as the cumulative volume of house purchases was equivalent to 4.5% of resident households in 2008 Q1, compared with 3.7% in 2025 Q2.

2 In contrast to the higher share of new-house purchases in previous expansions, with average ratios of 40% in the period 2004-07.

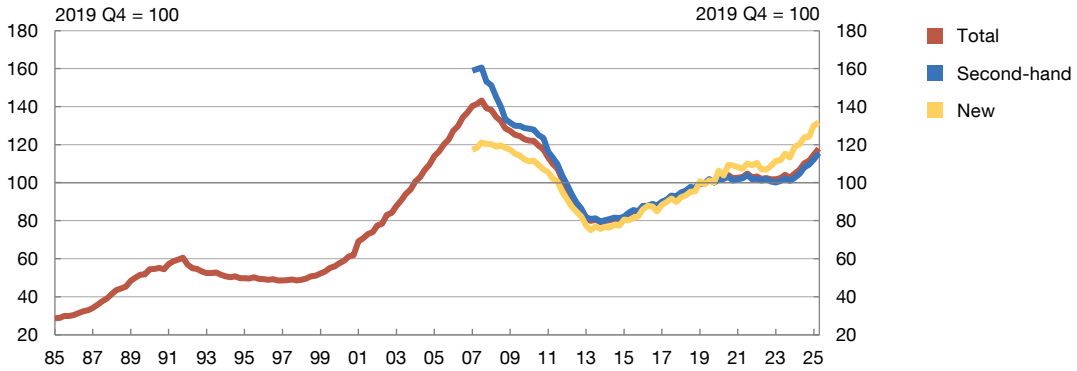
Chart 4.1

Strong demand and relatively rigid supply continued to exert upward pressure on house prices in 2025 H1, while house purchases grew at a slower pace than in 2024

4.1.a House purchases (a)



4.1.b House prices. Deflated by the consumer price index (CPI)



SOURCES: Banco de España, INE and Ministerio de Transportes y Movilidad Sostenible. Latest observation: 2025 Q2.

a Purchases signed before a notary.

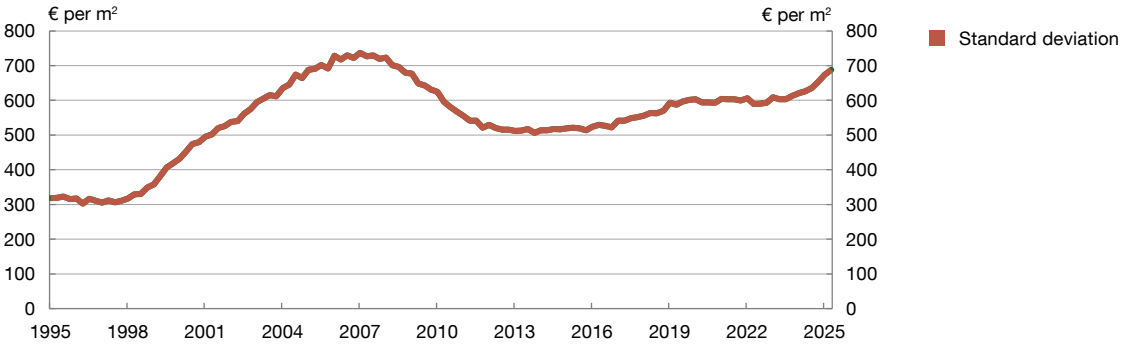
2024, respectively. By segment, second-hand housing saw a sharper price increase (12.6%) than new housing (12.2%), in contrast to the dynamics observed between 2019 and 2024. In real terms, house prices grew at a rate of 10.3% year-on-year in 2025 Q2, 17.7% below the peak reached at the outset of the global financial crisis in 2007 Q3 (Chart 4.1.b). Meanwhile, commercial property prices have proven more buoyant than in 2024, particularly in the central areas of large cities (Chart A2.4.1.1 in Annex 2).

This house price growth came about amid continued robust demand and relatively rigid supply. Demand for residential housing remained strong, driven by population growth in 2025 H1 (an additional 85,000 resident households). Moreover, demand from non-residents also contributed to this momentum, accounting for more than 29,000 house purchases.[3] This

3 According to the estimates available, these gross purchases will result in a net increase of 15,000 units in the housing stock held by non-residents.

Chart 4.2
Real house prices are highly heterogeneous at provincial level

4.2.a Standard deviation of real house prices (a)



SOURCES: Banco de España, Ministerio de Transportes y Movilidad Sostenible and INE. Latest observation: 2025 Q2.

a House prices reflect the appraisal values of open-market housing. Nominal values are CPI-deflated, using 2025 H1 as the base period.

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increase in housing demand[4] outstripped the 45,000 new dwellings completed in the same period, meaning that demand continued to be met through second-hand home purchases. In the short term, the expected rise in the number of new dwellings (based on housing starts and new building permits) will still fall short of the new demand in 2025.[5]

Provincial heterogeneity in house prices has increased in the recent period. Robust real price growth in higher-priced provinces, compared with the modest growth or sluggishness observed in medium and low-priced provinces, has led to widening real price dispersion between provinces since 2024 (Charts 4.2 and 4.3). Specifically, the gap between the real price at the 90th percentile in the distribution by province and the provincial average has expanded in the recent period (Chart 4.3). Real price levels in the lowest-priced provinces are comparable to those seen in the late 1990s, while those in the highest-priced provinces have reached their 2004 levels, but remain below their 2008 peaks. These geographical differences may be associated with numerous factors, such as heterogeneity in household income developments, in the strength of non-resident demand and in the conditions for mortgage loans to households. Box 4.1 documents, using data at postcode level, the relationship of these and other factors with recent price developments across geographical areas in Spain.

The indicators relating house prices in Spain to household income and interest rates show an upward trend, above their estimated long-term level. These indicators yield more positive values when changes in house prices are high compared with changes in

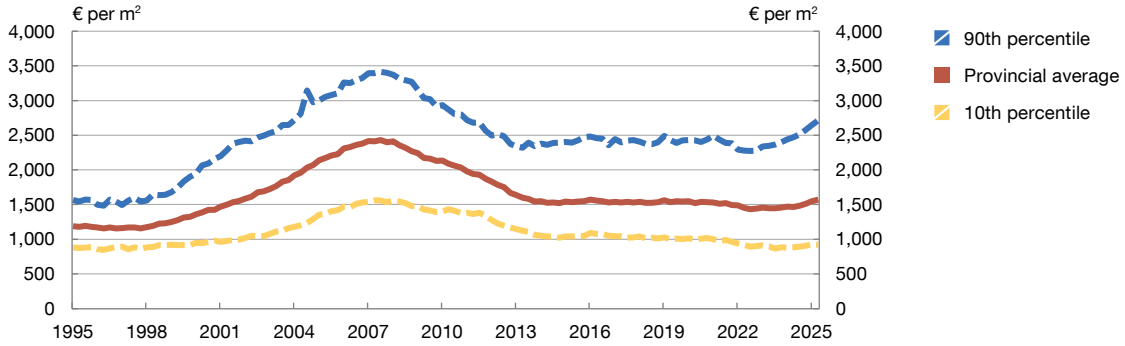
4 Other demand components would stem from alternative uses of housing (such as seasonal or holiday rentals) and unmet demand from young people who have delayed leaving the family home.

5 In 12-month cumulated terms, net household formation stood at 190,000 in 2025 H1 compared with new housing production comprising around 100,000 housing completions and 140,000 housing starts in the same period. In the period 2021-25, the gap between net household creation and new housing production stood at 700,000.

Chart 4.3

In the recent period, real house prices in the higher-priced provinces have risen more sharply, while other provinces have seen moderate or no increases

4.3.a Provincial heterogeneity in real house prices (a)



SOURCES: Banco de España, Ministerio de Transportes y Movilidad Sostenible and INE. Latest observation: 2025 Q2.

a House prices reflect the appraisal values of open-market housing. Nominal values are CPI-deflated, using 2025 H1 as the base period. Provinces are ordered on an annual basis, according to their real price distribution.

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income or interest rates.[6] They held steady at slightly positive levels in the period 2021-24, as the rise in house prices in that period was offset by a similar recovery in household income. However, this year the indicators have seen a year-on-year increase to June, when they reached between 5.3% and 12.7%, compared with an estimated range of 3.0%-9.4% at end-2024 (Chart 4.4.a). The estimated range at June 2025 is similar to that recorded in 2004, and below the maximum values observed in early 2008.

The use of a synthetic indicator allows for a more comprehensive assessment of the possible build-up of risks in the real estate market, as it considers both supply and demand-side factors. This indicator brings together information from four groups of key variables for the real estate market: households' financial position, credit conditions, house valuation and real activity.[7]

According to the synthetic indicator, real estate market vulnerabilities have increased since 2024, but they remain significantly below the levels observed in the run-up to 2008 (Chart 4.4.b). The higher valuation component reflects the factors discussed two paragraphs above. The composite indicator of credit conditions has eased slightly of late

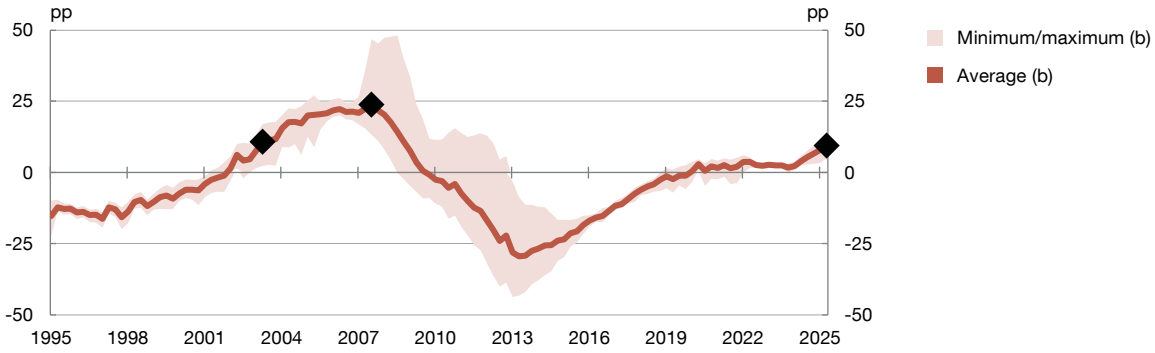
6 These house price indicators, which are relative to their long term levels, are subject to notable uncertainty and should be interpreted with caution. See, for example, Box 3 of the European Central Bank's June 2011 *Financial Stability Review* and Box 3 of its May 2015 edition. The use of a battery of indicators (drawing on different methods and various combinations of prices, income and interest rates), rather than just one, contributes robustness, but it should be noted that not all factors relevant to the housing market (such as supply conditions) are included.

7 For more information about how the synthetic indicator for the property market is calculated, see note A2.4.1.2 in Annex 2 and Pana Alves, Carmen Broto, María Gil and Matías Lamas. (2023). "Risk and vulnerability indicators for the Spanish housing market", Documentos Ocasionales, 2314, Banco de España.

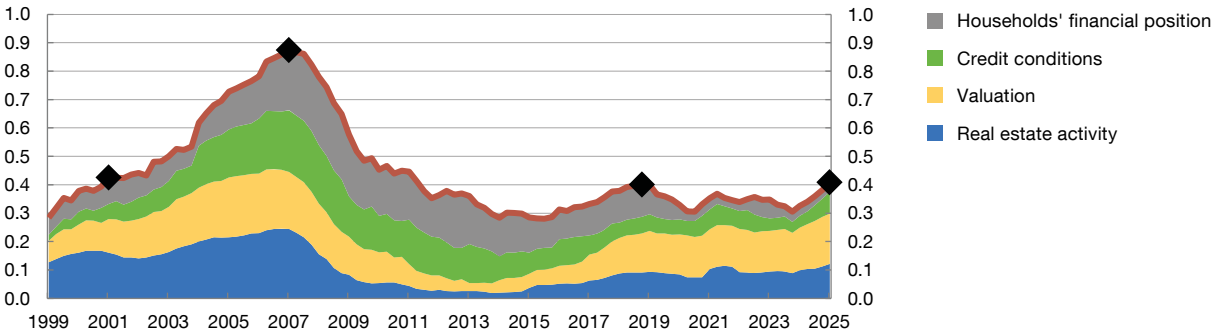
Chart 4.4

Despite some increase driven by house prices, the indicators of risks in the real estate market as a whole stand well below their pre-2008 levels

4.4.a Indicators relating house prices to long-term trends, household income and interest rates (a)



4.4.b Synthetic indicator of risks in the real estate market (a) (c)



SOURCES: Banco de España and INE. Latest observation: June 2025 (March 2025 for the synthetic indicator).

a The black diamonds depict the maximum value, the latest value available and its equivalent at previous dates with upward trends.
b, c Note A2.4.1.2 in Annex 2.

(see the following section for more details), although it is at historically low levels. Meanwhile, real activity has seen far more moderate growth, owing to a low supply of new dwellings. Lastly, households' financial position has remained steady at historically favourable levels (see also Chapter 2). On balance, in June 2025 the synthetic indicator was at levels similar to those observed in 2019 (the year before the pandemic) and 2001, and well below those of the 2000s real estate boom. In sum, real activity, households' financial position and credit conditions have made much smaller contributions to the overall indicator level in the recent period than they did before 2008.

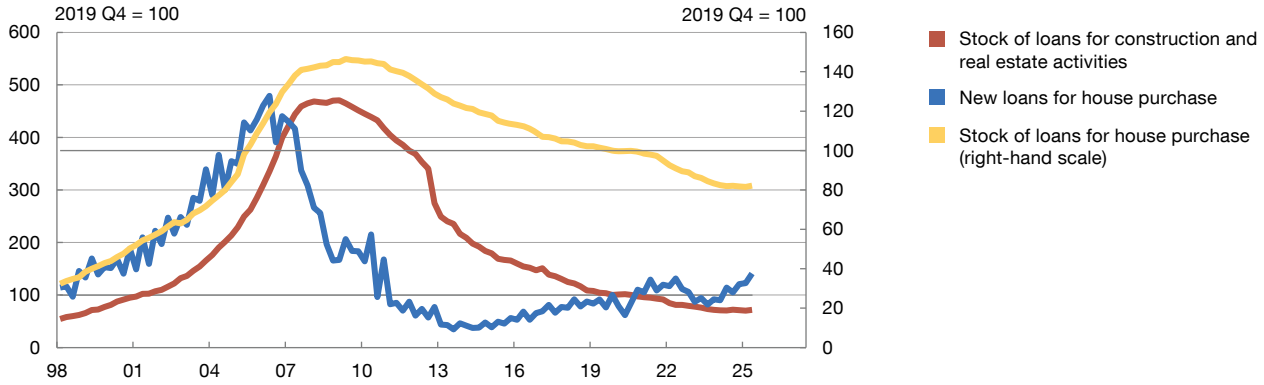
4.1.2 Financing

New mortgage loans to households for house purchase increased sharply in 2025 H1. These loans grew at a year-on-year rate of 26.2% in 2025 Q2, a slowdown from the 39.9%

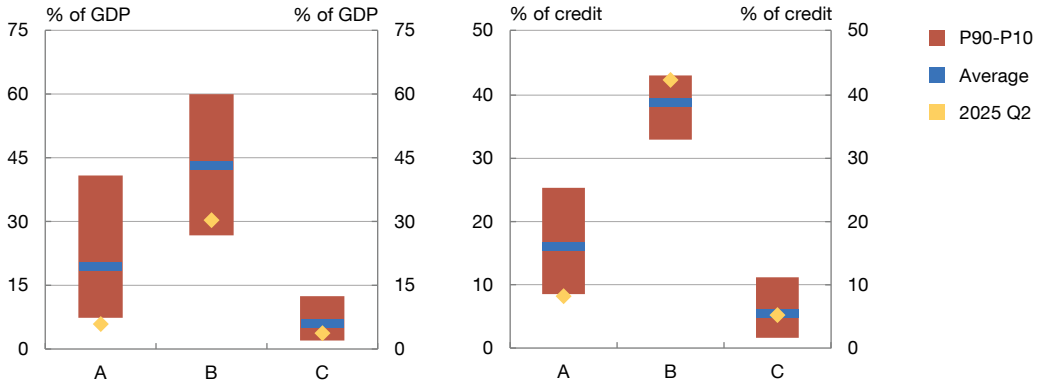
Chart 4.5

Lending to the real estate sector remains on the path of recovery that began in late 2024 and continues to account for a small share of GDP

4.5.a Bank credit to the real estate sector. Index (a)



4.5.b Bank credit to the real estate sector. Share of GDP and total credit to households and firms resident in Spain (b)



A: Stock of loans for construction and real estate activities
B: Stock of loans for house purchase
C: New loans for house purchase

SOURCES: Colegio de Registradores and Banco de España. Latest observation: June 2025.

a The three series are depicted in real terms and using 2019 Q4 as the base year in each case.
b The 90th and 10th percentiles and average of the series are calculated for the period 1998 Q1-2025 Q2.

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observed in Q1. As a result, new loans to households for house purchase are at their highest level in a decade, but are significantly below the levels observed in 2000-08 (Chart 4.5.a).

Despite the recent expansion, the ratios of new mortgage loans to GDP and to total bank lending remain at moderate levels. These ratios are close to their historical averages and well below the peaks reached before the global financial crisis (Chart 4.5.b).

The ongoing growth in the flow of new lending has led to a moderate rise in the stock of mortgage loans to households for house purchase. The stock of mortgage loans increased by 2.4% in the 12 months to 2025 Q2, consolidating a third consecutive quarter of

positive year-on-year growth. This has brought to a close the continuous declines seen since the end of the global financial crisis, although the recent changes differ markedly from the developments observed in 2000-08 (Chart 4.5.a).

Mortgage loans for house purchase comprise the largest portfolio of bank credit to households and firms, but they account for only a small share of GDP. In June 2025 the stock of mortgage loans accounted for 42.5% of total bank lending to households and firms, close to the 90th percentile of the time series. This high share is attributable to the larger relative decrease in other loan types since 2008, particularly in lending for construction and real estate activities. For instance, after a protracted decline between 2009 and 2021, the stock of mortgages now stands at a low level relative to GDP (30.3%, close to the 10th percentile of the time series).

Bank lending to the construction and real estate sector also grew moderately, but holds close to an all-time low. The nominal amount of such lending rose by 3.7% year-on-year in June 2025, continuing its upward trend for a fourth consecutive quarter and thus contributing to the expansion of total business lending (see Section 3.1). However, in real terms (Chart 4.5.a) and as a share of GDP and total credit to households and firms, this lending is still close to an all-time low (Chart 4.5.b).

Lending standards for new mortgage loans relative to household income held at moderate levels,[8] despite a recent small increase in the loan-to-income (LTI) ratio. The average LTI ratio stood at 4.5 in mid-2025, slightly higher than the 4.4 observed in June 2024. However, the average loan service-to-income (LSTI) ratio declined by 0.5 percentage points (pp) in the same period, to stand at 22.6% in June 2025, as the higher LTI ratio on new loans was offset by lower interest rates. Based on the historical information available, the percentage of loans with LTI and LSTI ratios above 5 and 30%, respectively, was contained, at levels similar to those observed in the late 1990s (Chart 4.6.a).

The amount of new mortgage loans relative to the value of the property has also held at contained levels, despite climbing slightly since early 2024. Since end-2023 the amounts of new mortgage loans relative to the property appraisal value (loan-to-value, or LTV) and to the purchase price (loan-to-price, or LTP) have risen moderately, to stand at 68.7% and 77.8%, respectively, in 2025 H1. The proportion of new loans with an LTV or LTP ratio above 80% also increased in the same period (Chart 4.6.b). However, based on the sample available, current LTP values are still low by historical standards, while LTV values are holding around the average for the period 2004-25.

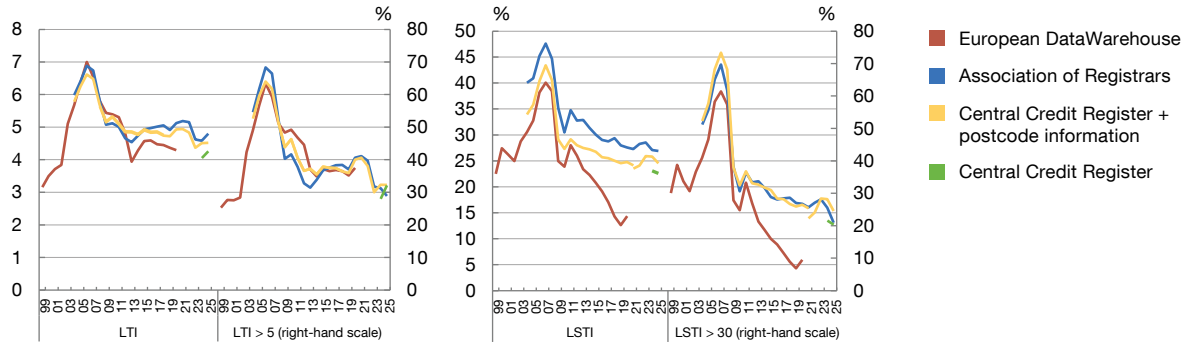
The maturities of new mortgage loans to households have increased slightly in 2025. The average maturity of new mortgage loans to households rose by more than six months in

8 Unlike previous Financial Stability Reports, various historical data sources have been combined to increase the time period covered for mortgage lending conditions metrics, with the aim of having information covering the entire cycle that began in the late 1990s. This has entailed drawing on sundry sources of information and proxies. In the case of income-related metrics, the analysis period has been extended back from 2007 to the late 1990s.

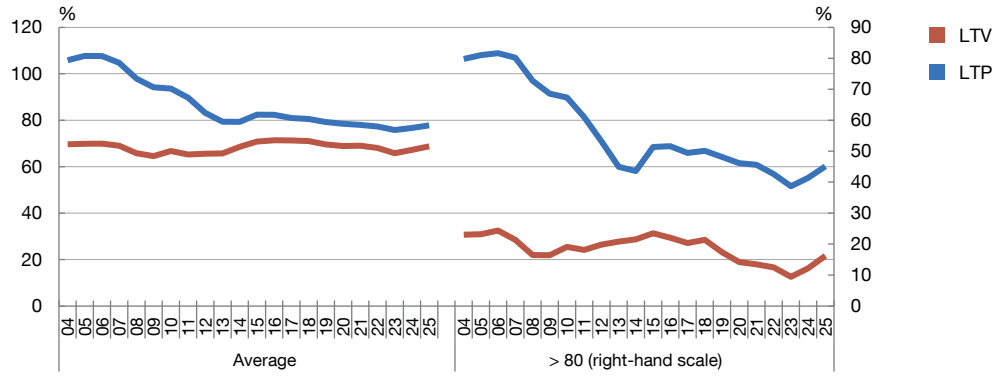
Chart 4.6

Lending conditions relative to income and collateral value for new mortgages have eased slightly in recent quarters

4.6.a Lending conditions (relative to income) for new mortgage loans to households (a) (b) (c)



4.6.b Lending conditions (relative to the collateral value) for new mortgage loans to households (d)



SOURCES: Colegio de Registradores and Banco de España. Latest observation: June 2025.

a, b, c, d Note A2.4.1.3 in Annex 2.

2025 Q2, to 26.5 years. Nevertheless, this is still considerably shorter than the all-time high reached in 2007 (30 years) and the historical average of the 2004-25 series (just above 27 years).

4.2 Financial markets

Monetary policy, money markets and government debt

Monetary policy in the euro area and the United States has eased slightly since the cut-off date for the last Financial Stability Report (FSR). In June 2025 the European Central Bank reduced its key interest rates by 25 basis points (bp), lowering the deposit facility rate to 2%, and has kept them unchanged since. In the United States, the Federal Reserve, which

had kept its policy rate unchanged since December 2024, cut it by 25 bp in September, and again in October 2025, to a range between 3.75% and 4.00%.

However, market expectations as to the course of official interest rates in the two areas have diverged (Chart A2.4.2.1 in Annex 2). The markets expect further gradual cuts to the policy rate in the United States over the coming months, to levels below those anticipated in mid-May. By contrast, market expectations as to euro area interest rates have been revised up slightly, with barely any further reduction envisaged.

In this setting, money market interest rates in the euro area have shown small fluctuations in both directions, depending on the term. On 29 October 2025 the one-year and three-month EURIBOR stood at 2.19% and 2.07%, respectively, up 12 bp and down 7 bp since the last FSR.

Long-term sovereign debt yields have fallen in most euro area countries and, particularly, in the United States. Specifically, US sovereign debt yields have been affected by expectations of a more accommodative monetary policy. At the cut-off date for this report, ten-year German and US sovereign bond yields stood at 2.6% and 4.1%, respectively, down 3 bp and 40 bp since the last FSR.

The slope of the sovereign yield curve between 10 and 30 years has steepened in recent months across different regions (Chart 4.7.a). This could reflect increased investor concern about public finances, but also lesser demand among traditional investors (such as pension funds and life insurers) in the very long-term segment due to other factors.

Ten-year sovereign spreads relative to the risk-free rate[9] in the euro area have diverged, with spreads rising in France and decreasing or holding steady in other countries (Chart 4.7.b). The widening in France is linked to the heightened political uncertainty in the country and to the market perception of its worsening public finance outlook. This deterioration has also been reflected in rating downgrades by some agencies (Chart A2.4.2.2 in Annex 2).[10] Nevertheless, its credit-agency ratings are still more favourable than the CDS-implied[11] ratings, in contrast to the pattern observed among other euro area countries (Charts 4.8). In Spain, the 10-year sovereign debt spread over the German Bund stands at 51 bp, down 12 bp since mid-May (Chart A2.4.2.2 in Annex 2), while several agencies have upgraded the country's credit rating in recent months.[12]

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9 The Overnight Indexed Swap (OIS) rate is considered the benchmark rate for euro area risk-free interest rates. The OIS rate is the fixed leg of an interest rate swap contract where the floating leg is the 1-day euro short-term rate (€STR).

10 France's rating was downgraded by Fitch from AA- to A+ (with stable outlook) on 12 September, by DBRS from AA (high) to AA (changing its outlook from negative to stable) on 19 September, and by S&P from AA- to A+ on 17 October, while on 24 October Moody's held its rating at Aa3 but changed its outlook from stable to negative. By contrast, in the case of Italy, Moody's raised its outlook from stable to positive on 23 May, Fitch upgraded its rating from BBB to BBB+ (with stable outlook) on 19 September, and DBRS upgraded its rating from BBB (high) to A (low) on 17 October.

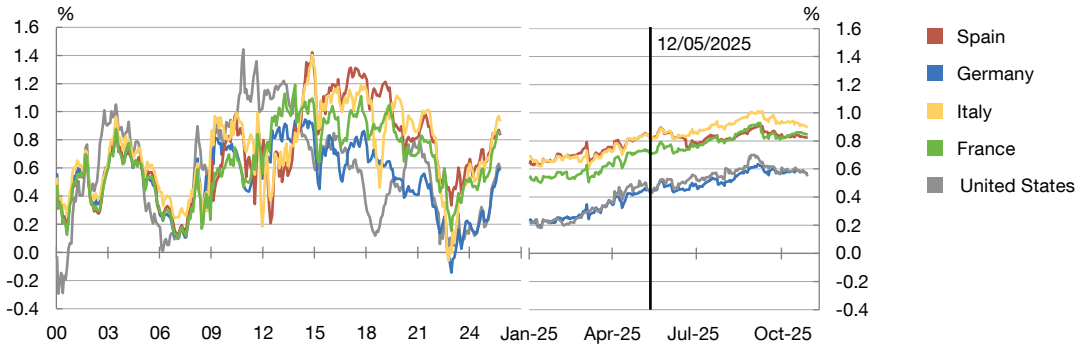
11 Credit default swaps (CDS) are a financial derivative that acts as coverage against default risk.

12 In the case of Spain, on 12 September S&P raised its sovereign credit rating from A to A+ (with stable outlook). In addition, on 26 September Moody's and Fitch each upgraded their rating for Spain, from Baa1 to A3 and from A- to A, respectively.

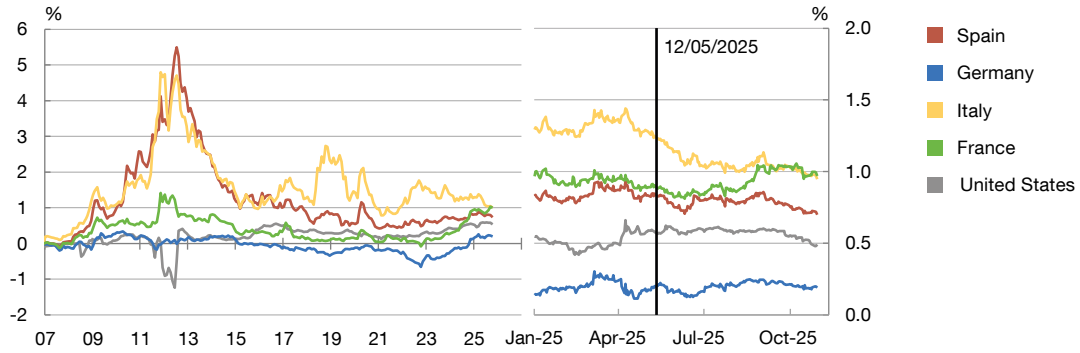
Chart 4.7

The slope of the sovereign yield curve has steepened in several advanced economies, but spreads relative to the risk-free rate have widened only in France

4.7.a Sovereign yield spreads (30Y-10Y) (a)



4.7.b Sovereign yield spreads (10Y-OIS) (a) (b)



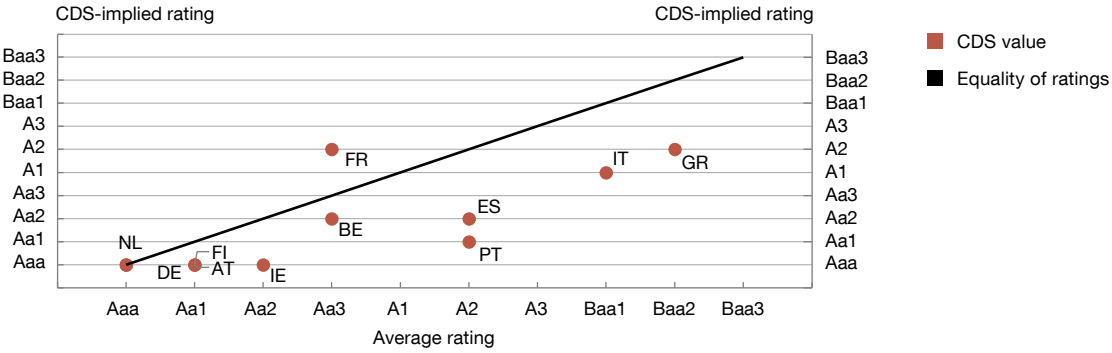
SOURCE: LSEG Datastream. Latest observation: 29 October 2025. 12 May 2025 is the cut-off date for the last report.

a The left-hand panel includes monthly average data, and the right-hand panel includes daily data.
b The series start in 2007, the first year from which OIS rate data are available.

Chart 4.8

France's credit-agency ratings are more favourable than the CDS-implied ratings, in contrast to the pattern observed among other euro area countries

4.8.a Average rating and CDS-implied rating of euro area countries (a)



SOURCES: Bloomberg, Moody's and Banco de España. Date of analysis: 29 October 2025.

a Credit default swaps (CDS) are a financial derivative that acts as coverage against default risk. CDS-implied ratings are derived from the rating implied by the sovereign CDS spread drawing on Moody's data. The average rating is calculated using the average of the Moody's, S&P, Fitch and DBRS ratings.

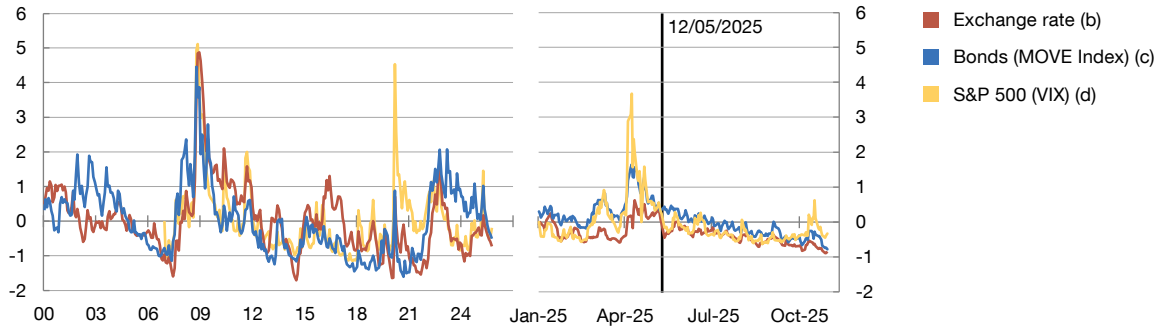
Equities and corporate bonds

Implied volatility in the financial markets and equity risk premia remain low, despite the high level of uncertainty (Chart 4.9). Although the financial markets have seen spikes in volatility in the period owing, for example, to bouts of renewed China-US trade tensions and strains at US regional banks,[13] these episodes have proven transitory. Thus, financial market volatility has declined since mid-May. The fact that the more adverse geopolitical and trade scenarios have not materialised has contributed to this current low level of volatility and the

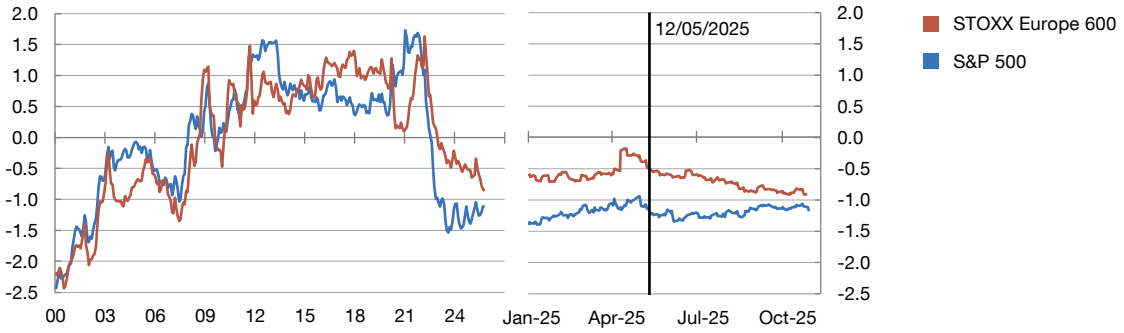
Chart 4.9

Financial market volatility is contained and equity risk premia remain very low, despite the high level of uncertainty surrounding economic policy and outlook

4.9.a Implied volatility (a)



4.9.b Equity risk premia (a) (e)



SOURCES: Bloomberg Data License, LSEG Datastream and Banco de España. Latest observation: 29 October 2025. 12 May 2025 is the cut-off date for the last report.

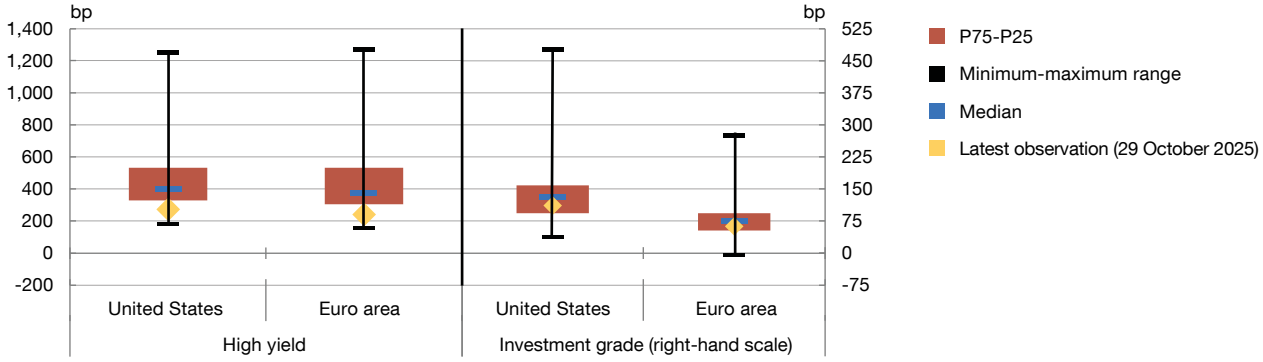
a De-meaned and standardised data for the period 2000-25. The left-hand panel includes monthly average data, and the right-hand panel includes daily data.
b Average three-month volatility in the dollar/euro, dollar/pound sterling and yen/dollar exchange rates.
c The MOVE measures implied volatility in the US Treasury bonds market.
d The VIX measures expected 30-day volatility in the US stock market. A high value points to increased market uncertainty.
e Note A2.4.2.3 in Annex 2.

13 The share price of US regional banks slumped in mid-October after two of them reported cases of large bad loans and borrower fraud. This triggered a strong negative market response, coming as it did shortly after two US firms (First Brands and Tricolor) filed for bankruptcy. Together, these two events appear to have revived concerns that there could be a greater underlying problem regarding credit quality and loose lending in the US market.

Chart 4.10

Corporate debt risk premia are below their historical median, especially in the high-yield segment

4.10.a Corporate spreads (a)



SOURCES: Banco de España, LSEG Datastream and Bloomberg Data License. Latest observation: 29 October 2025.

a Corporate spreads over the swap curve of the ICE Bank of America Merrill Lynch indices. The swap curve represents the risk-free rates at different maturities. In an interest rate swap, the two parties agree to exchange periodic interest payments, one based on a fixed rate and the other on a variable rate. Monthly series data since January 1998.

persistence of record-low equity premia. Nevertheless, this situation stands in contrast to the continued high level of uncertainty surrounding economic policy and outlook.

The main stock market indices have risen sharply since the cut-off date for the last FSR (Chart A2.4.2.4 in Annex 2). This performance appears to be attributable to sound corporate earnings, particularly in the United States, and to expectations of a more accommodative US monetary policy. Since the cut-off date for the last FSR, the EURO STOXX index has climbed 6.5%, driven by the sound performance of the banking sector (Chart A2.4.2.4 in Annex 2), while the US S&P 500 index has risen by 17.9%. The growth of the S&P 500 has been spurred by tech and artificial intelligence firms, which account for a very high – and growing – percentage of its total market cap (see Section 5.2). For its part, the IBEX 35 index has risen by 18.3%, also driven by the banking sector, with earnings outperforming market expectations.

Corporate debt risk premia have decreased since the cut-off date for the last FSR and remain at historically low levels, particularly in the high-yield segment (Chart 4.10)**.** Nevertheless, there were one-off spikes in corporate debt risk premia as a result of the bouts of increased risk aversion in the period.[14]

Foreign exchange markets and gold

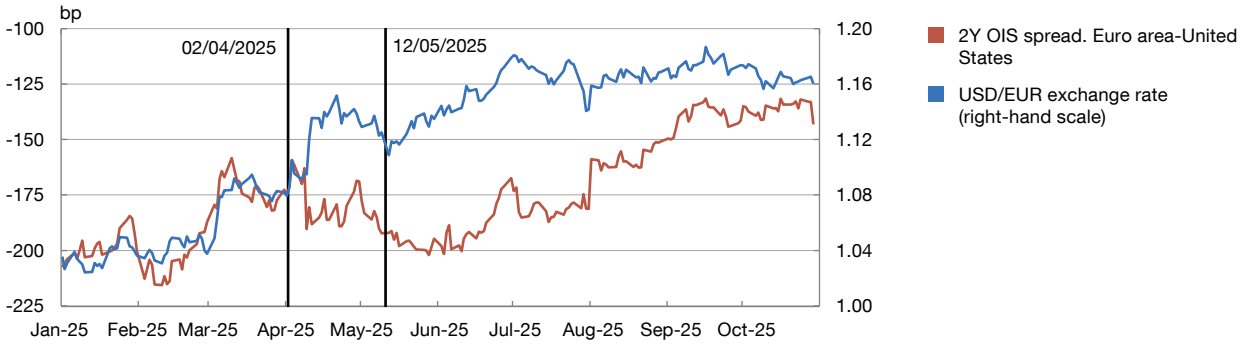
The depreciation of the dollar against the main currencies has slowed in recent months. However, the expectations of a more accommodative monetary policy in the United States, as

14 According to Dealogic cumulative corporate issuance data since 1999, high-yield corporate debt currently accounts for 18.5% and 14.1% of total corporate debt in the United States and the euro area, respectively.

Chart 4.11

The depreciation of the dollar has slowed, but expectations of a more accommodative US monetary policy continue to exert downward pressure on the exchange rate

4.11.a 2Y OIS spread between euro area and United States (a) and USD/EUR exchange rate



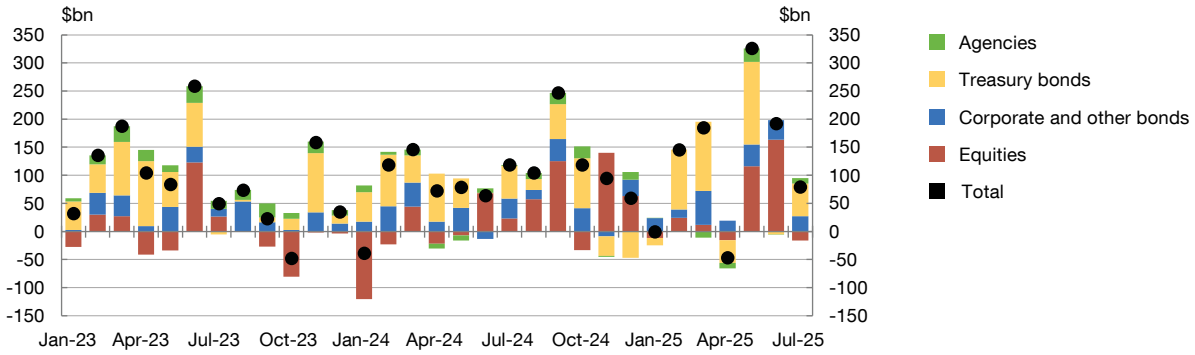
SOURCES: Banco de España and Bloomberg Data License. Latest observation: 29 October 2025. 12 May 2025 is the cut-off date for the last report.

a The 2Y OIS spread between the euro area and the United States captures the difference in 2-year risk-free rates between the two areas.

Chart 4.12

Foreign investment in US assets is increasing, recovering after the drop at the start of the tariff crisis in April of this year

4.12.a Net purchases of US long-term assets by foreign investors. Monthly flows



SOURCE: Bloomberg Data License. Latest observation: July 2025.

reflected in the narrowing of the 2-year OIS spread, continue to exert downward pressure on the exchange rate (Chart 4.11). Since the April downturn during the tariff crisis, international investors' appetite for the dollar has recovered somewhat, as can be observed in the more buoyant financial investment flows to the United States in recent months (Chart 4.12).

Despite the backdrop of subdued volatility and increased prices of risk-bearing assets, the price of gold has continued to climb in recent months. After holding steady between May and mid-August 2025, gold prices have once again begun to rise and surpassed $3,900 per ounce, representing a cumulative rise of 49% in the year, the largest annual increase since 1979. An increase in the price of gold usually signals greater risk aversion, but the current rise

has been accompanied by low equity and bond risk premia, suggesting limited concern about risk among investors.[15]

Emerging financial markets

Financial markets in the emerging market economies have performed relatively well since April, against a backdrop of heightened global uncertainty. These economies' exchange rates against the dollar have broadly appreciated in recent months, influenced by expectations of a looser US monetary policy. In addition, the stock markets have performed well, and the cost of financing internal and external debt has decreased. The financial markets in Latin America have outperformed those in other regions since July, owing to the easing of some local fiscal sustainability risks (Chart A2.4.2.5 in Annex 2).[16]

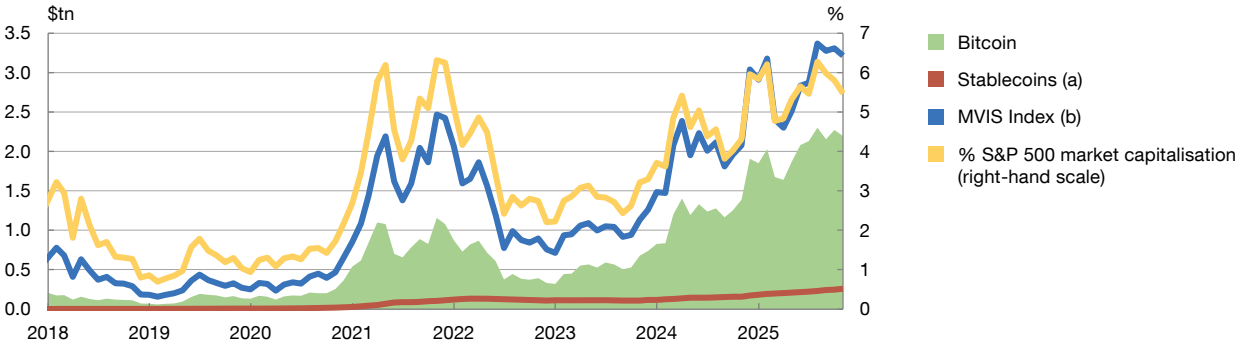
Crypto-assets

Crypto-asset market capitalisation has surged in 2025 so far, although it has been subject to some volatility. The market cap of the MVIS index, which groups together the top

Chart 4.13

The value of crypto-assets has continued to climb and, although they still account for a small part of the financial markets, their rapid growth could pose greater risks to financial stability

4.13.a Market value of crypto-assets



SOURCES: LSEG Datastream, MVIS, Coinmarketcap and Banco de España. Latest observation: 29 October 2025.

a Aggregate market value of Tether and USDC.
b The MVIS CryptoCompare Digital Assets 100 Index, which includes the largest 100 crypto-assets by market value (not including stablecoins).

15 Some analysts ascribe it to a higher hedging demand against extreme adverse events by some investors. However, others link it to momentum trading, an investment strategy where investors buy assets whose prices have risen in the recent period, thus fuelling momentum.

16 One exception was Argentina, whose exchange rate depreciated and sovereign spread rose owing to the growing political uncertainty in the run-up to the legislative elections on 26 October. As a result of the explicit support provided by the US Administration and the government's electoral victory, the sovereign spread narrowed markedly, stock market indices rose and the depreciation pressures on the peso eased. The US Treasury intervened in the currency markets with the purchase of Argentine pesos and arranged a $20 billion swap with the Banco Central de la República Argentina.

100 unbacked crypto-assets, rose strongly from mid-May, but saw significant downward corrections in October. Its market cap is dominated by Bitcoin, which accounted for a share of around 70% in October 2025 (Chart 4.13). Meanwhile, the value of stablecoins (asset-backed crypto-assets),[17] such as Tether or USD Coin, is also growing rapidly, but it continues to represent a relatively small proportion of total crypto-asset market cap. Indeed, in October 2025 the aggregate market value of Tether and USD Coin accounted for just 8.1% of the MVIS index market cap.

The financial stability risks posed by crypto-assets markets are limited by their scale, but this could change if they grow rapidly. In October 2025, the MVIS market cap was equivalent to 5.5% of that of the S&P 500 index (Chart 4.13). The two markets are positively correlated and there is also a growing degree of interconnectedness with the banking sector through, for instance, the sale of crypto-investment products and the provision of custody services. Section 5.4 discusses the emerging risks associated with these assets in more detail.

17 Stablecoins are a type of cryptocurrency, pegged to one or several assets with a stable value, such as the dollar or the euro, to minimise fluctuations in their value.

Box 4.1

ANALYSIS OF THE GEOGRAPHICAL HETEROGENEITY IN HOUSE PRICE GROWTH OVER THE RECENT PERIOD (2022-25)

This box draws on postcode-level data to examine the empirical relationship between house price growth in Spain in the period 2022-25 and, on the one hand, various socioeconomic factors and, on the other, mortgage loan use and conditions. Compared with more aggregate data, postcode-level data provide a wider range of information to infer whether there is a link between the different variables studied.[1]

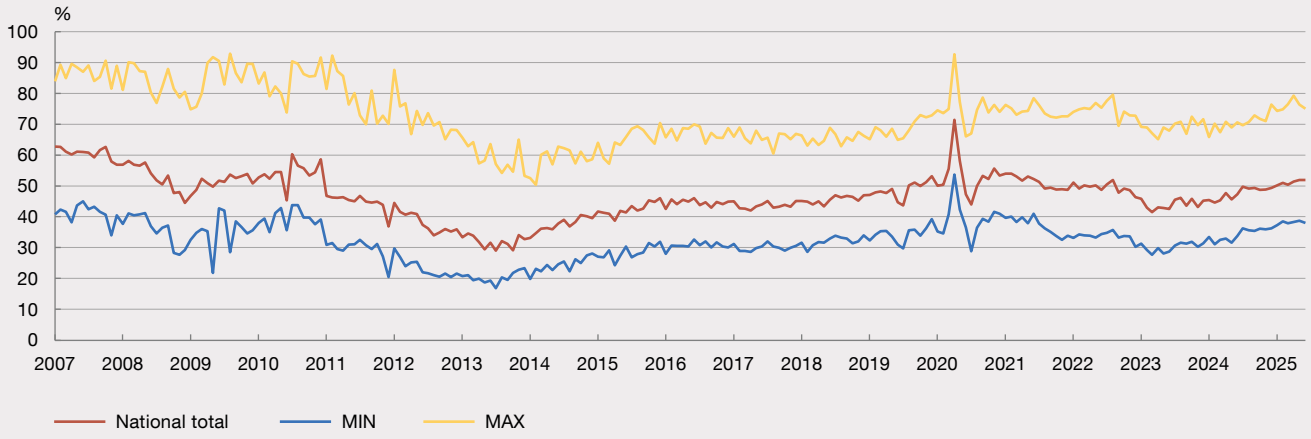
It is particularly useful to assess whether, beyond real factors such as demographic or income growth pressure, a greater or lesser use of mortgage financing and the conditions of such loans could be associated with differences in house price developments. The focus on mortgage loan conditions stems from several stylised facts observed at aggregate level that underscore the importance of this type of credit for the housing market, such as the volume of mortgage-financed house purchases and the positive correlation between average house prices and the average mortgage loan amount.

A substantial percentage of house purchases are made using mortgage loans. According to information from the Spanish Notarial Statistics Centre (CIEN), 51.1% of house purchases in 2025 H1 were financed with mortgages (Chart 1). This figure is, however, below the 61.5% recorded in 2007 (the first year for which data are available) and reflects an increased use of own funds since the global financial crisis. In the recent period, mortgage use has increased since 2023.

There is also significant geographical heterogeneity in the percentage of mortgage-financed house purchases (ranging from 40% to 70% in each region in 2025 H1, for instance), although it has become more uniform since 2007.

As Chart 4.2 in the main text shows, there is notable heterogeneity in the change in house prices per square metre at provincial level, which is also observed at postcode level (ranging from €1,334 to €3,467 at June 2025, for example).[2] Moreover, there is some heterogeneity in terms of lending conditions, such as the loan-to-value (LTV) ratio and the loan service-to-income (LSTI) ratio. Chart 2 shows that, in the period between 2022 Q4-2023 Q1 and 2024 Q4-2025 Q1, the LTV and LSTI distributions by postcode remained relatively stable and showed limited geographical dispersion,

Chart 1
Mortgage-financed house purchases (a)



SOURCE: Colegio del Notariado. Latest observation: June 2025.

a The bands reflect the maximum (MAX) and minimum (MIN) values of the percentage of mortgage-financed house purchases, calculated at each date drawing on the values observed in the different regions.

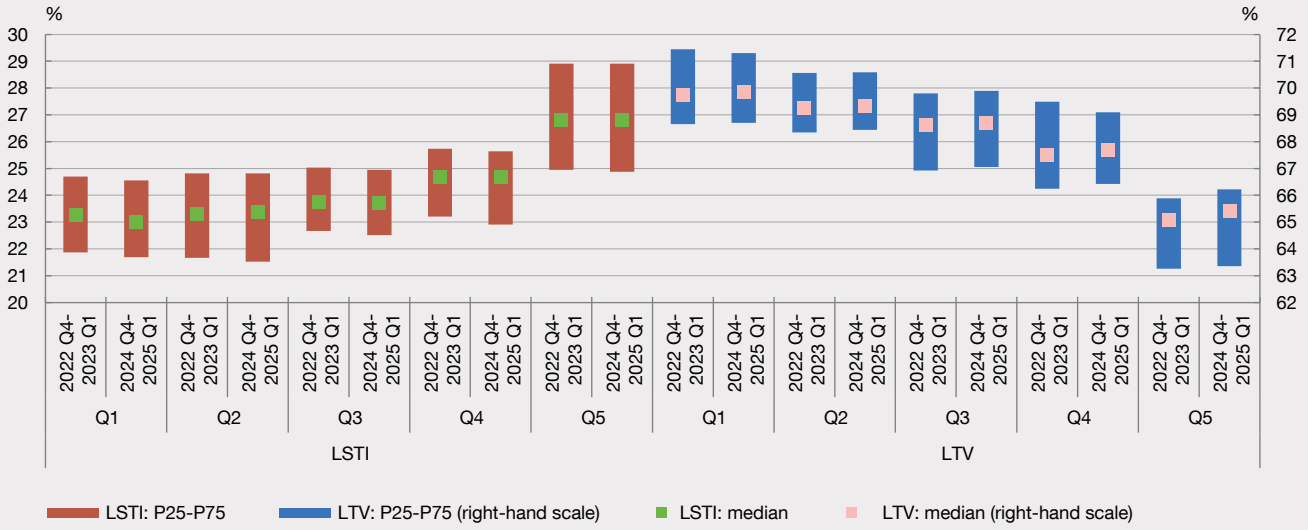
1 For instance, population growth within a province typically exerts uneven pressure across the geographical areas designated by postcodes, or lending conditions may vary across postcodes due to different supply or demand-side factors. Analysis at loan and/or borrower level would provide additional information that could improve statistical identification and inference. The analysis at postcode level presented in this box is an intermediate step within a broader work programme.

2 Nominal prices are deflated using the provincial consumer price index and expressed per square metre of living space.

with median values ranging between 23 percentage points (pp) and 27 pp (LSTI) and 65 pp and 70 pp (LTV). The most notable differences are in high-income postcodes, which present lower LTV values and higher LSTI values. This has a mixed effect on risk-taking, as borrowers in these postcodes assume a larger debt service burden, but the risk is mitigated by the higher value of the collateral.

The relationship, at postcode level, between the recent change in house prices and lending conditions and various socioeconomic factors is analysed below. For this purpose, a regression-based econometric analysis has been conducted. The sample contains information on house purchases, mortgage loans and socioeconomic variables at postcode level for two periods: 2022 Q4-2023 Q1 and 2024 Q4-2025 Q1.[3] To obtain a homogeneous sample and ensure comparability between the two periods, only purchases involving similar types of housing are used.[4] The dependent variable used is the rate of change in the real average purchase price per square metre in the postcode between the two periods considered. The explanatory financial variables include: (1) the proportion of mortgage-financed house purchases; (2) the LSTI ratio; and (3) the loan-to-price (LTP) or LTV ratio, whichever is higher.[5] Both the initial level of these

Chart 2
Change in mortgage loan conditions between 2022 Q4-2023 Q1 and 2024 Q4-2025 Q1 by postcode income level (a) (b) (c)



SOURCES: Banco de España, Colegio de Registradores and INE. Latest observation: June 2025.

a The LSTI ratio for each mortgage is estimated as the ratio of the total annual cost of servicing the mortgage loan (including principal and interest payments), calculated according to the terms of the loan agreement (time remaining to maturity, outstanding principal, interest rate type and interest rate spread), to the household's net annual income. For more details, see note A2.4.1.3 in Annex 2.
b The LTV ratio is the amount of the mortgage principal relative to the appraisal value of the property at the time of purchase, based on Association of Registrars information.
c The interquartile range of the LTV and LSTI ratios corresponds to the difference between the mean of the first quartile and the mean of the third quartile of the LTV and LSTI ratio distribution by postcode. The median is also calculated by aggregating data at postcode level. These calculations are replicated for different postcode groups by income quintile (from Q1 to Q5).

3 The base period selected (2022 Q4-2023 Q1) averts any potential atypical effects associated with the recovery following the COVID-19 pandemic.
4 Flats bought on the open market, with a surface area of between 40 and 150 m^2, yielding a sample of 301,741 transactions. The sample is restricted to postcodes with over 30 house purchases in each of the two periods, so as to consider sufficiently deep local markets. The final sample contains 1,083 postcodes. In the regression estimates, observations are weighted by the number of purchases in the first period.
5 In addition to avoiding collinearity problems, the inclusion of the LTV or LTP ratio, whichever is higher, makes it possible to capture the larger associated credit risk, through the inclusion of the appraisal value or the purchase price, whichever is lower. A loan-to-income (LTI) ratio variable was also considered but, due to its high correlation (above 90%) with the LSTI ratio, it did not contribute any significant additional information.

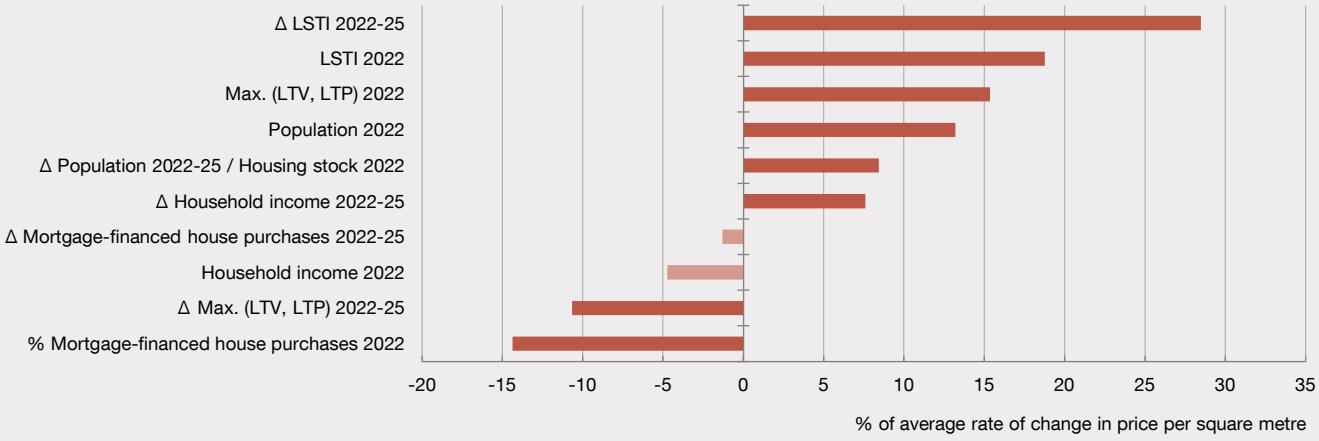
variables and the rate of change between the two periods are incorporated.

In addition, various demographic and income characteristics are used as control variables to measure the pressures of real factors on supply and demand. Specifically, population and average income per postcode (initial value and change between the periods) and the ratio of population change to the initial housing stock in the corresponding municipality are considered. This latter variable is particularly important as a proxy of demand-side pressure vis-à-vis the initial housing supply available.

Based on the results of the econometric analysis, the financial variables show a significant correlation with the increase in prices at postcode level, once demographic and income factors have been considered (Chart 3). House price growth has tended to be higher in those postcodes with mortgages that on average had a higher initial level or larger increase in the LSTI ratio, or a higher initial LTV or LTP ratio. However, a rise in the LTV or LTP ratio tends to be correlated with smaller house price increases. This suggests that, once the other lending conditions are factored in, average mortgage amounts were unable to grow at the same pace in the postcodes with higher price growth.[6] In any event, the larger-scale effects appear to be associated with the LSTI ratio and its increase in the sample period, such that looser lending conditions overall would be associated with greater price growth.

In addition, the estimation also indicates that the proportion of mortgage-financed house purchases at the start of the period studied was negatively correlated with the increase in house prices, while the change in this variable between the two periods did not play a significant role. This would point to greater relative demand-side pressure on prices from buyers with sufficient financial resources to buy a property without a mortgage.

Chart 3
Change in house prices per square metre estimated by the model in response to increases in different explanatory variables (a)



SOURCE: Banco de España calculations, drawing on Colegio de Registradores and INE data.

a The chart depicts the estimated rate of change in house prices per square metre following an interquartile (25th to 75th percentile) increase in the distribution of each explanatory variable. The value of each bar is obtained by multiplying the interquartile range of each variable by the variable's estimated coefficient in the linear regression that includes all the explanatory variables presented in the chart. The final result is expressed as a percentage of the average rate of change in the price per square metre observed in the sample. The analysis is performed at postcode level in the period using the change in prices between 2022 Q4-2023 Q1 and 2024 Q4-2025 Q1. The symbol Δ indicates rate of change. The darker bars denote variables whose regression coefficients are significant at a 5% confidence level. The standard errors of the regression are corrected for heteroscedasticity.

6 This would be attributable to either supply or demand-side factors, which require a more complex analysis to be individually identified. Nevertheless, it would suggest that certain indebtedness limits have been reached and that borrowers need higher initial savings relative to the property's value.

Table 1
Increase in house prices per square metre estimated by the model for different postcode groups, by increase in the population relative to housing stock and by increase in the LSTI ratio (a)

%

		Δ LSTI 2022-25				
		Q1	Q2	Q3	Q4	Q5
Δ Population 2022-25 / Housing stock 2022	Q1	11.4	10.5	11.0	11.3	12.6
	Q2	11.5	11.7	12.1	12.3	13.0
	Q3	12.3	12.4	12.2	13.3	14.0
	Q4	12.2	12.7	13.2	13.6	14.8
	Q5	14.6	13.5	15.7	14.4	16.5

SOURCE: Banco de España calculations, drawing on Colegio de Registradores and INE data.

a The table depicts the increase in house prices per square estimated by the model by quintile of the distribution of the increase in the population relative to the initial housing stock and of the increase in the LSTI ratio between 2022 Q4-2023 Q1 and 2024 Q4-2025 Q1. The values are obtained drawing on the coefficients of a multivariate regression that includes the variables indicated as well as other demographic and financial variables. The estimated increases are obtained using the average of all the explanatory variables within each sub-sample formed by the intersection of each quintile. The symbol Δ indicates rate of change.

Turning to the demographic variables, the findings are consistent with the assumption that income and population growth exert upward pressure on house prices. Furthermore, an exploratory analysis suggests that demographic dynamics (such as population growth relative to the initial housing stock) are associated with larger house price rises. House price increases also appear to be stronger in postcodes with a sharper rise in the LSTI ratio (Table 1).[7]

Overall, these findings point to the existence of a relationship between mortgage loan conditions and house prices. More generally, the analysis underscores the importance of adopting a multi-factor approach (which incorporates both real and financial variables) and using granular data to characterise changes in house prices.

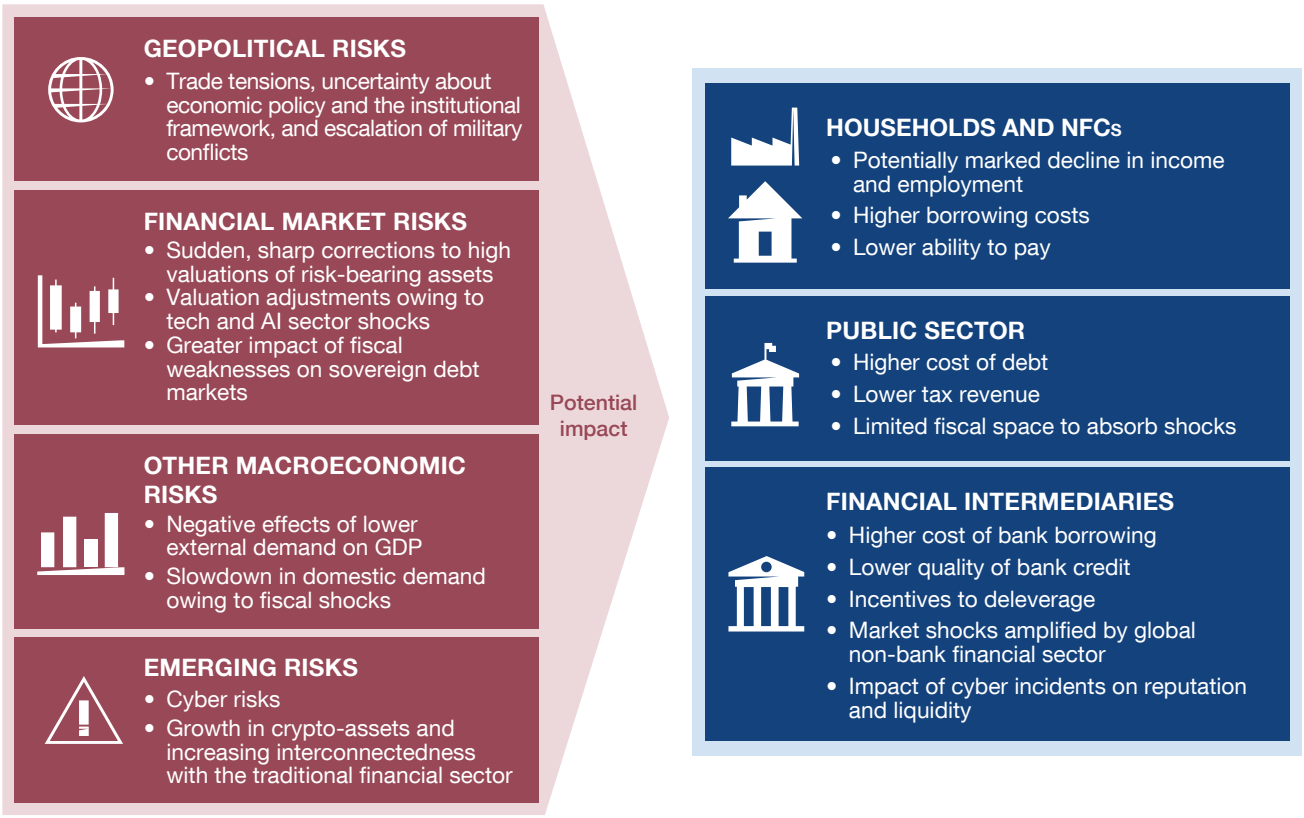
When interpreting the findings, it should be borne in mind that the analysis presented here does not include an estimation of causal effects. That is to say, it is not certain that modifying an explanatory variable in the future will yield the same change as that observed in the sample period (for example, a change in the LSTI ratio or population growth would not necessarily have the same quantitative effects as those measured in the period 2022-25). To deepen its analysis of the relationship between lending conditions and the housing market, the Banco de España is developing a broader work programme, as described in Section 6.3 of this report.

7 The analysis of the relationship between each variable and the change in house prices (Chart 3) assumes that the other model variables remain constant. It should, however, be borne in mind that postcodes with very different characteristics, for example in terms of demographic developments, may also show marked differences in other model variables that, when taken together, influence the effect estimated.

5

RISK ANALYSIS

Figure 5.1
Risk analysis (a)



SOURCE: Banco de España.

a In this report risks are identified with adverse changes – with an uncertain probability of occurrence – in economic and financial conditions, or in the physical or geopolitical environment, which hamper or impede financial intermediation, with negative consequences for real economic activity.

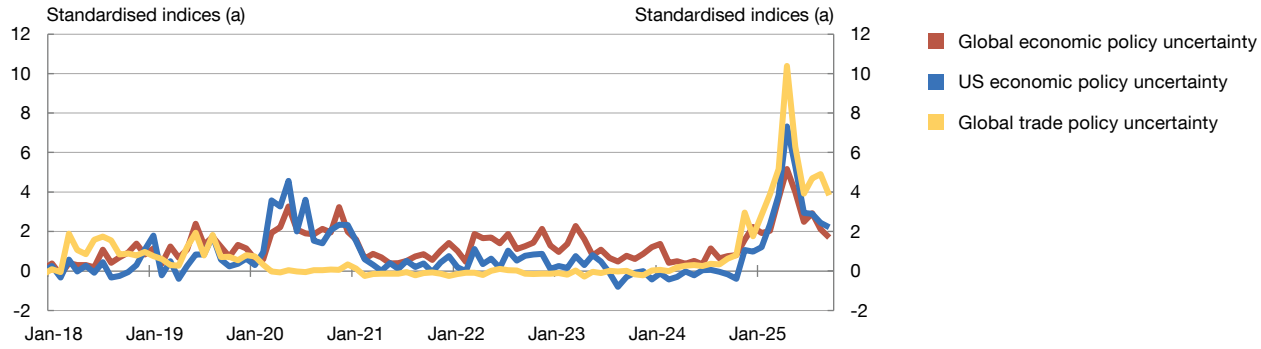
This chapter discusses the risks to the stability of the Spanish financial system identified by the Banco de España and how they may interact with the vulnerabilities analysed in previous chapters. This risk diagnosis is underpinned by discussions held between Banco de España staff and various external experts (see Box 5.1) and by its own analysis.

5.1 Geopolitical risks

Geopolitical tensions continue to be one of the main sources of risk to global financial stability. Even though the recent agreements reached between the United States and some of its main partners have helped reduce trade policy uncertainty, it remains above the normal levels observed since the late 1990s (Chart 5.1). More generally, uncertainty about US economic policies and the economic governance framework worldwide have global implications. Moreover, the persistence and possible escalation of military conflicts pose additional risks.

Chart 5.1
Economic policy uncertainty indicators remain high

5.1.a Uncertainty indicators



SOURCE: Economic Policy Uncertainty drawing on data from Scott R. Baker, Nicholas Bloom and Steven J. Davis. (2016). Measuring Economic Policy Uncertainty. *The Quarterly Journal of Economics,* 131(4), pp. 1593-1636. Latest observation: September 2025.

a Standardised indices with data from 1997, the first year of the global economic policy uncertainty series.

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Trade tensions

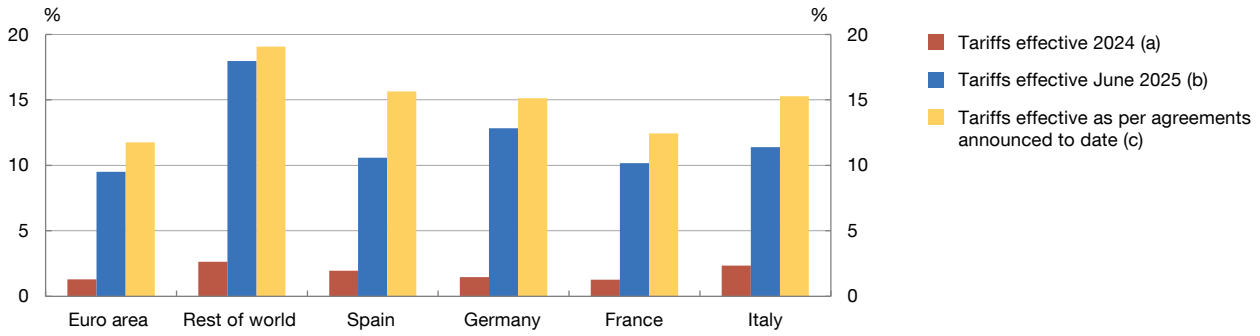
In recent months, agreements have been reached between the United States and its main trading partners, at the same time as the tariff hikes already approved have become effective. Since April the United States has agreed trade deals with the European Union (EU), China, Japan and the United Kingdom. Nevertheless, the average effective tariff on US imports stood at 18% at end-October (including announced measures), compared with barely 3% at December 2024. Imports from the euro area are subject to a somewhat lower average tariff of close to 11%, compared with 1% at end-2024 (Chart 5.2).

These agreements have reduced trade risks, but some elements of uncertainty remain. Despite the recent agreements between the United States and China to reduce mutual tariffs, the tensions between the two countries and the uncertainty regarding the final outcome of the trade talks persist. In addition, several of these agreements include non-tariff clauses whose effects on global trade are unclear. For example, in the US-EU agreement, they affect key sectors such as defence and energy and provide, in particular, for increased purchases of US defence and energy equipment and investment by EU firms in the United States. The agreement also envisages other measures related to national security and rules of origin,[1] similar to the deals reached with other countries such as the United Kingdom.

1 Rules of origin serve to determine the country of origin of a product, to enable the appropriate distinctions to be made when applying measures such as tariffs and quotas.

Chart 5.2
The United States has increased its tariffs on its trading partners in 2025

5.2.a US tariffs on imports



SOURCES: US Trade Census and Banco de España. Latest observation: 29 October 2025.

a Tariffs effective in 2024.
b Tariffs effective at 1 June 2025.
c Tariffs effective according to agreements announced up to 29 October 2025. It also includes tariffs announced, although some may not yet be effective or may not have been confirmed by both parties to the agreement. By way of exception, it does not include the new tariffs on medium and heavy-duty trucks, buses and their parts announced on 17 October and set to become effective on 1 November 2025.

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US policies

Uncertainty about US economic policies remains high and encompasses various areas. These notably include immigration policy (with restrictions being introduced that have the potential to reduce the labour supply), financial deregulation and measures to fuel growth in stablecoins (see Section 5.4) and, more generally, some changes to the institutional framework that particularly affect the independence of various public agencies.

Political pressure on independent government agencies entails risks to macroeconomic and financial stability. If institutions, including the Federal Reserve System, are subject to political pressure, it could jeopardise their independence and affect economic policy decisions. This would pose various macroeconomic risks, primarily to price and financial stability, especially over the medium to long term. All these developments may also ultimately affect the role of the dollar as an international reserve currency, potentially giving rise to international financial fragmentation.

Military conflicts

It is difficult to predict the global economic impact of the major conflicts seen since 2022, which so far has been significant but limited. The war between Russia and Ukraine has intensified this year,[2] while tensions persist in the Middle East, despite the Gaza peace agreement. The limited global economic effects of these conflicts have helped

2 See, for example, the Conflict Monitor for the war in Ukraine.

keep the perception of this risk low,[3] but escalation, albeit uncertain, could be rapid. This could trigger global supply chain disruptions – especially in energy commodities – and a widespread increase in risk aversion.

Potential impacts of geopolitical risks

With its high degree of trade openness, the Spanish economy could be affected by a global slowdown if geopolitical risks continue to materialise. Spain's lesser direct exposure to the United States, compared with other European economies, mitigates the risks through trade channels. Nevertheless, the drag on activity would reduce the income of households and firms and thus their ability to pay. This in turn would drive up both credit risk and impairment provisions at banks, diluting their profitability. If this hypothetical global downturn were accompanied by a tightening of financing conditions, the private sector's financial position would tend to deteriorate further, although low private sector indebtedness and the banking system's broad retail funding base would partially offset these potential impacts (see Sections 2.1, 2.2 and 3.1 of this report). General government, with a weaker starting position, would be particularly affected by a slowdown in activity and higher borrowing costs.

NATO members are set to increase their military expenditure significantly over the coming years in view of their new spending commitments. Historical evidence suggests that, under certain conditions, this type of fiscal impulse can trigger greater economic dynamism. However, the specific impact is difficult to estimate and depends on a multitude of factors, not least the size of the fiscal impulse, its components (for example, spending on personnel versus research and development) and the proportion spent on imports.[4] Moreover, as noted in Section 2.3, it makes reducing fiscal vulnerabilities more difficult.

5.2 Financial market risks

High valuations of risk-bearing financial assets in an uncertain environment

The possibility of sudden, sharp corrections to high stock market valuations worldwide remains a high risk. As mentioned in Chapter 4, despite the geopolitical and economic uncertainty, financial market volatility is still contained and risk premia are low, all of which drives up valuations of risk-bearing assets. In particular, price-to-earnings (P/E) ratios are close to the 75th percentile of the historical distribution in the euro area and well above this level for the US market overall (Chart 5.3). The higher valuations on the US stock markets are

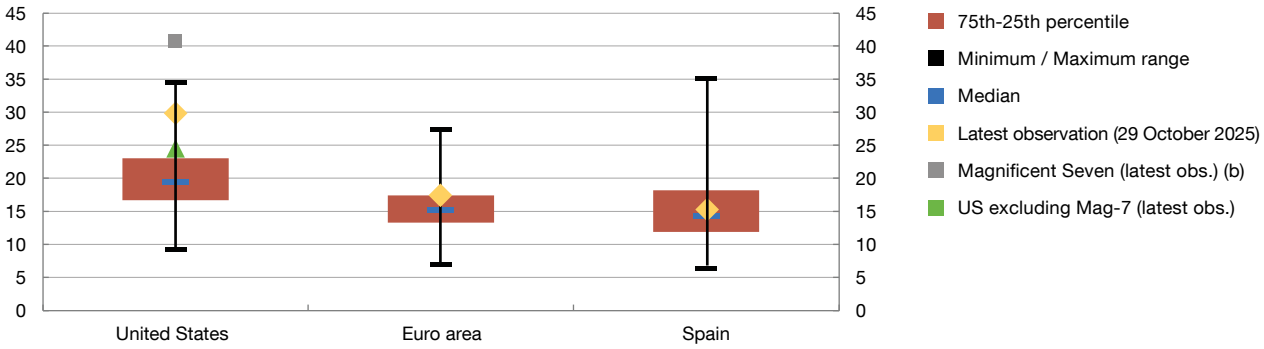
3 For example, in the case of oil, the Iran-Israel conflict in mid-June drove oil prices up from $65 to almost $80 per Brent barrel, but the effects were temporary and faded once the conflict ended, assisted also by downward revisions to global demand and higher OPEC production. Recently, following the announcement in October of US sanctions on Russia's two major oil companies, oil prices have risen again.

4 Banco de España. (2025). "Macroeconomic projections and quarterly report on the Spanish economy. June 2025".

Chart 5.3

Stock market P/E ratios remain high by historical standards, especially in the United States and for the "Magnificent Seven"

5.3.a Stock market P/E ratios (a)



SOURCES: Banco de España, LSEG Datastream and Bloomberg Data License. Latest observation: 29 October 2025.

a US P/E data refer to the S&P 500 index, while the P/E data for the euro area and Spain are calculated by Datastream drawing on euro area and Spanish stock market indices. Daily data since January 1985 (January 1987 for Spain).
b Amazon, Apple, Google, Meta, Microsoft, Nvidia and Tesla.

largely explained by a small group of big technology and artificial intelligence (AI) firms – the "Magnificent Seven" – which account for a very high share of total market capitalisation. Excluding these firms, the P/E ratios for the US S&P 500 index would be considerably lower, close to the 75th percentile.

The risk of sharp surges in corporate bond risk premia also remains, particularly in the high-yield segment. On the corporate bond markets, spreads are generally below their historical median, both in the euro area and in the United States (Chart 4.10). These corporate risk premia are particularly low by historical standards in the high-yield segment.

Current valuations may be vulnerable to corrections if they incorporate overly optimistic expectations about macroeconomic developments or corporate earnings. A less favourable news flow could reignite financial tensions and trigger both a spike in volatility and sudden, sharp corrections in stock prices and risk premia. Moreover, highly-leveraged non-bank financial intermediaries with tight liquidity positions – particularly international open-ended funds and hedge funds – could amplify these stock market corrections (see Section 3.2 of this report).

Systemic importance of the tech and AI sector

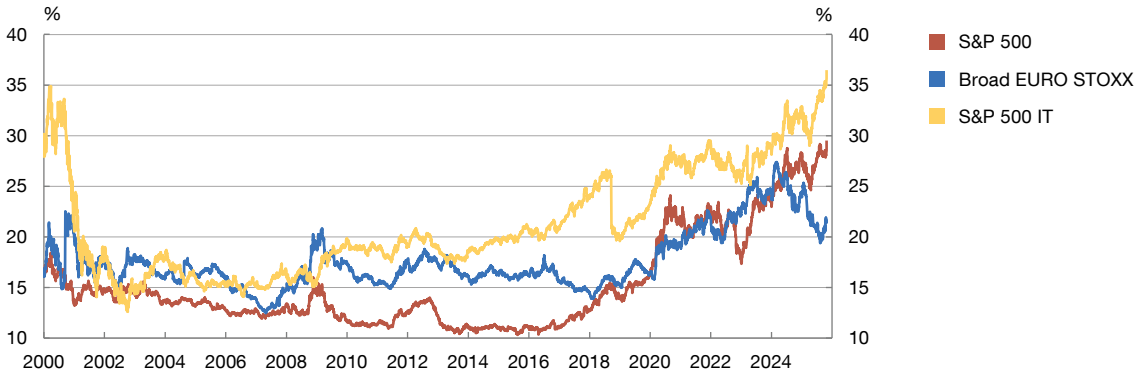
Stock market concentration among a small group of firms has increased significantly in recent years and is at historically high levels. This is particularly true in the United States (Chart 5.4) owing to the weight of certain big tech and AI firms.[5] Although stock market

5 At the cut-off date for this report, the market cap of the "Magnificent Seven" stocks amounted to 37% of the total market cap of the S&P 500 index.

Chart 5.4

Stock market concentration has increased in recent years and is particularly high in the United States and among tech stocks

5.4.a Stock market concentration (a)



SOURCE: LSEG Datastream and Bloomberg. Latest observation: 29 October 2025.

a For the S&P 500 and EURO STOXX, the data refer to the market cap of the largest five stocks in each index at each point in time as a proportion of the total market cap of the indices. For the S&P 500 IT (Information Technology) index, the data refer to the market cap of the S&P 500 IT stocks as a proportion of the total market cap of the S&P 500 index.

concentration is somewhat less marked in the EURO STOXX, larger firms also account for a significant part of the index.[6]

Potential valuation corrections among US tech firms and their high stock market weight continue to pose an additional market risk factor. These firms have consistently surprised on the upside, underpinned by growing demand for the services they provide, and their high market valuations reflect expectations of their continuing strong performance in the future. But these favourable expectations may not be met if certain risks materialise, such as the emergence of new competitors, loss of business owing to technological change, potential global supply chain difficulties or regulatory change.

European financial markets are not immune to concentration risks. Concentration is also high in European markets by historical standards, albeit to a much lesser extent than in the United States. In addition, European markets are also exposed to US concentration risk through global corporate interconnectedness or the impact of a potential US stock market correction on global financial conditions.

Sovereign debt valuations

Sovereign risk premia may rise if markets become more concerned about the fiscal position of some economies. So far, the deterioration in the fiscal position of some

6 In Europe, the Dutch tech firm ASML has the highest market cap in the EURO STOXX index, but among the leading stocks there is a smaller proportion of tech firms and a greater presence of industrial, fashion and pharmaceutical sector stocks.

advanced economies has had a limited impact on sovereign debt premia, but a sharper uptick cannot be ruled out if investors become more risk averse or the fiscal outlook worsens further.

Possible impacts of financial market risks

A potential financial market correction, even if owing to external factors, would have a significant impact on the Spanish economy. As indicated in previous editions of this report, tighter global financial conditions would adversely affect the Spanish economy through both real and financial channels. This tightening could have a greater impact in Spain through the cost of government debt issuance, considering the current high government debt-to-GDP ratio. The Spanish financial sector would also be adversely affected by the higher cost of wholesale funding. In addition, borrowing costs for households and non-financial corporations (NFCs) would rise as the increased cost of financial market funding fed through to bank credit. All these factors would also have a negative impact on economic activity.

5.3 Other macroeconomic risks

Risks to activity and inflation not linked to geopolitical tensions or financial market developments are contained. However, materialisation of these risks could curb economic activity and tighten financial conditions, albeit to a lesser extent than the shocks discussed in Sections 5.1 and 5.2 above. This section begins with a brief overview of the outlook for growth and inflation, followed by an analysis of these other risks.

Lower global growth in 2026 and slower disinflation

The global economy was more resilient than expected in 2025 H1, despite rising economic policy uncertainty. In the first half of the year, global economic growth outperformed the forecasts published in the wake of the US government's tariff hike announcement in April, prompting improved forecasts for 2025 for many economies, including Spain and the euro area. In some cases, this resilience was the result of temporary factors, such as trade frontloading ahead of the introduction of new tariffs.

Forecasts of public institutions and private sector analysts point to slower economic momentum worldwide in 2026. The disappearance of trade frontloading, along with the permanent effects of the tariff hikes, the persistent uncertainty and its adverse impact on spending decisions, all underpin this expected slowdown in global economic activity in the coming year.

The global disinflation process has lost pace, especially in some advanced economies outside the euro area. Over the summer, inflation rates fell more slowly in most regions and

in some areas, for instance in the United States or the United Kingdom, they have even picked up again, owing to downward stickiness in services inflation and higher energy and food prices.

In this global setting, the Spanish economy continues to post more robust growth than the large euro area economies, although it is expected to lose momentum in the coming quarters. GDP growth has outpaced expectations, underpinned by strong private sector domestic demand, as the contribution of both government consumption and net exports has been broadly neutral. According to the Banco de España's latest projection exercise,[7] GDP will grow by 2.6% in 2025, down from 3.5% in 2024. The latest review of the 2024 GDP figures published by the National Statistics Institute (INE) entails an upward revision for 2025.[8] In any event, in the coming years, GDP growth is expected to continue to slow, to rates slightly below 2%.

Other risks to economic activity and prices

Growth in activity in Spain faces risks associated with the climate of global uncertainty, even in the absence of severe geopolitical or financial crises. The precautionary decline in private spending could be greater than expected, in Spain and in other countries. In addition, a fall in confidence among some of Spain's main trading partners, such as France or Germany, would have a negative impact on external demand.

When assessing the risks to Spanish economic activity it is important to consider the weight of services in its composition. In particular, tourism services account for a high share of GDP (12.3% in 2023, the latest INE figure available) and shocks to global tourism preferences or cyclical demand swings could dampen output growth. Tourism services would also be vulnerable to a deterioration in international economic relations and to the spread of certain military conflicts (risks discussed in Sections 5.1 and 5.2 above).

The vulnerabilities of public finances in Spain and in other advanced economies pose downside risks to growth. The extent to which these vulnerabilities may increase the impact of geopolitical and financial market risks has been analysed in Sections 5.1 and 5.2. However, they may also undermine GDP growth through an erosion of confidence and fiscal policy tightening if agents perceive a deterioration in the sustainability of public finances, which could potentially be triggered by a wide range of cyclical and structural shocks apart from those analysed in Sections 5.1 and 5.2 above.

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7 Banco de España. (2025). "Macroeconomic projections and quarterly report on the Spanish economy. September 2025".

8 The statistical review published by the INE on 19 September revised up the GDP growth rate for 2024 to 3.5%, from 3.2% which was the figure available at the cut-off date for the September projections. The INE also revised up the quarter-on-quarter growth rates for 2025 Q1 and Q2. These revisions to the national accounts automatically entail an upward revision of the GDP growth rate for 2025 compared with the 2.6% envisaged in the Banco de España's September projections.

At the global level, an entrenched slowdown in disinflation could prompt higher interest rates. The probability of rate rises currently appears to be contained, and in the United States in particular expectations have even swung towards policy rate cuts. Nevertheless, this is still a macroeconomic risk which, were it to materialise, would prompt some tightening of global financial conditions.

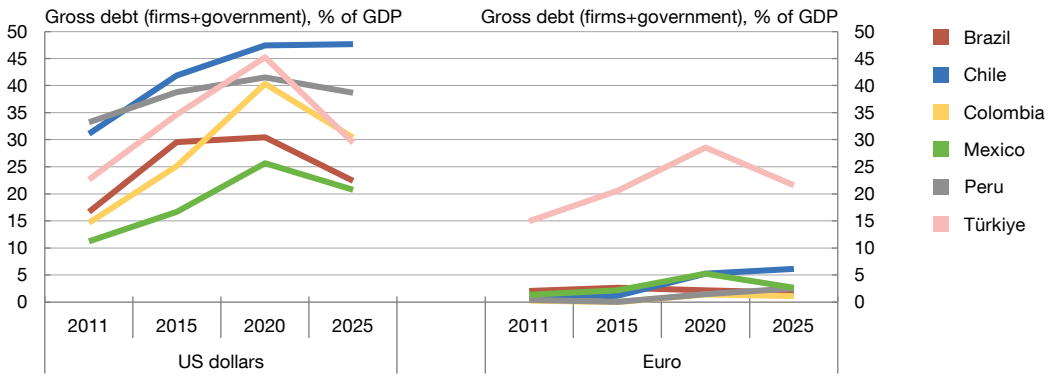
Risks linked to emerging market economies

The Spanish banking sector has a significant presence in some emerging market economies identified as having risks associated with fiscal and external imbalances and heavy reliance on foreign currency funding. Some of these economies have high

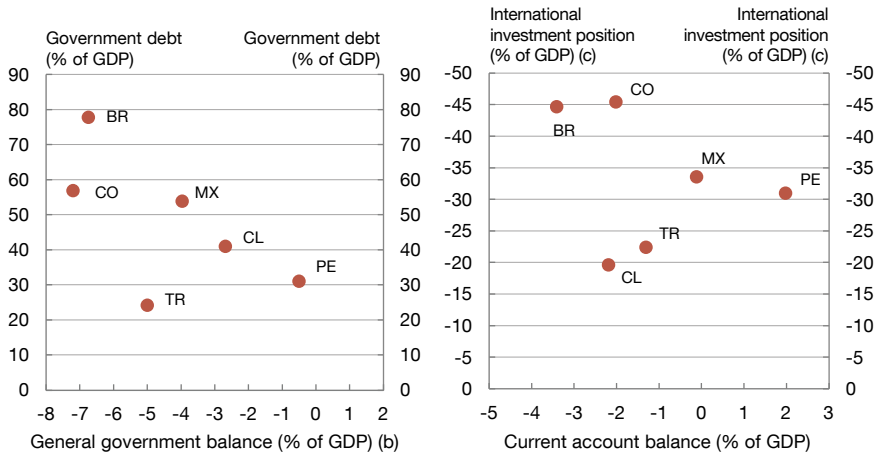
Chart 5.5

Some emerging market economies with fiscal and external vulnerabilities could be particularly affected by a possible dollar appreciation

5.5.a Gross foreign currency debt of firms and general government, by currency



5.5.b Vulnerability indicators: 2025 Q2 (a)



SOURCES: Institute of International Finance and Dealogic. Latest observation: 2025 Q2.

a BR: Brazil; CL: Chile; CO: Colombia; MX: Mexico; PE: Peru; and TR: Türkiye.
b General government surplus (+) or deficit (-) as a percentage of GDP.
c External assets less external liabilities (stocks) as a percentage of GDP (inverted scale).

levels of domestic and external debt denominated in foreign currencies, mainly in US dollars and to a lesser extent in euro (Chart 5.5a). This renders them vulnerable to a brusque depreciation in exchange rates, which could give rise to capital outflows and influence monetary policy conduct, especially in economies such as Colombia or Brazil that have higher fiscal or external imbalances (Chart 5.5b).

5.4 Emerging risks

Cyber risks

In a setting of growing exposure to significant cyber incidents,[9] managing cyber risks is a priority for the financial sector. Indeed, drawing on supervisory information and meetings with external analysts (see Box 5.1), these incidents are considered one of the main emerging threats.

However, although their capacity to disrupt operations is high, whether cyber incidents might cause long-lasting damage to financial stability is less certain. As discussed in more detail in Chapter 5 of *the Financial Stability Report, Spring 2025,* the most plausible way in which they could do so would be by triggering a widespread liquidity crisis, caused by abrupt withdrawals of funds owing to a loss of confidence following a serious, severe and long-lasting operational incident with systemic impact. Yet even in such a scenario, technological countermeasures, supervisory coordination mechanisms and potential liquidity provision by monetary authorities would mitigate their effects.

Technological advances and the use of cyber attacks as a geopolitical tool can alter the importance of these risks for financial stability. Advances in AI and quantum computing could pave the way for new forms of cyber attacks, but also for more sophisticated defence mechanisms. If cyber attacks were to become more of a threat, the risks to financial stability would increase. Meanwhile, the growing entrenchment of a divided world order could foment geopolitically motivated cyber attacks, with greater potential for disruption than cyber crime.

Crypto-assets and stablecoins

The rapid expansion of crypto-asset markets poses important challenges for financial stability, especially against a backdrop of growing interconnectedness between crypto-assets and the traditional financial system. Although these markets remain relatively small in size, the rapid expansion and inherent volatility of crypto-assets – particularly those not backed by traditional financial instruments – could amplify financial market crisis

9 The Financial Stability Board (FSB) defines cyber incidents as malicious or non-malicious events that compromise the confidentiality, integrity or availability of information or interconnected information systems.

scenarios (see Box 4.1 of *the Financial Stability Report, Spring 2025)*. In this respect, the recent legislative momentum in the United States, which seeks to encourage development of crypto-assets, could heighten such risks by fostering their take-up.

Stablecoins,[10] which by design are pegged to reserve assets, pose specific risks in the medium to long term. These risks relate to potential banking disintermediation, large-scale redemption requests and an undermining of the effectiveness of some authorities' monetary policies. Their use as a means of payment or deposit can erode banks' funding bases, disrupting the transmission of monetary policy and generating liquidity tensions in stressed scenarios. A loss of confidence in a stablecoin could trigger large-scale withdrawals and potential spillover risks into other crypto-assets or even other traditional financial assets.[11] Moreover, the adoption of stablecoins with foreign currency-denominated reserve assets in a given jurisdiction could diminish the effectiveness of monetary policy in that jurisdiction and increase its exposure to external risks.[12]

Limited progress in regulating stablecoins worldwide may exacerbate these risks. As shown in a recent FSB report,[13] countries have made progress in regulating crypto-asset activities, but progress on global stablecoin arrangements has been slower. The report also reveals significant gaps and inconsistencies in the regulation of crypto-assets that could pose risks to financial stability and the development of a resilient digital asset ecosystem.

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10 Stablecoins (or asset-backed crypto-assets) are backed by a reference asset, such as a currency (e.g. the US dollar) or other type of asset, via stabilisation mechanisms that seek to control their volatility. Issuance of stablecoins is regulated and supervised. This entails compliance with prudential capital and liquidity requirements by their issuers and distinguishes them from non-asset-backed cryptocurrencies which are not subject to similar controls.

11 The European Systemic Risk Board has specifically highlighted the possibility of this risk in the case of third-country multi-issuer stablecoin schemes (see Crypto-assets and decentralised finance), which in turn led to the issuance of Recommendation ESRB/2025/9.

12 Particularly important in this respect are the US crypto-asset initiatives, whose ultimate scope and implementation are yet to be determined and which seek to drive financial innovation and foster US leadership in this market. Developments in these initiatives will likely entail greater exposure to the US dollar for other economies.

13 *Thematic Review on FSB Global Regulatory Framework for Crypto-asset Activities*, 16 October 2025.

Box 5.1

EXTERNAL INFORMATION ON FINANCIAL STABILITY RISKS AND VULNERABILITIES

The Banco de España has continued compiling external information (begun in the previous edition of the Report) with the aim of better identifying the main financial stability risks and vulnerabilities that could affect the Spanish economy.

Banco de España staff met with Spanish bank chief risk officers and market analysts over the course of September 2025. Prior to these meetings a survey was circulated on risks and vulnerabilities potentially affecting financial stability, which served to structure the discussion.

This box provides a summary of the views collected from the survey and the meetings. It should not under any circumstance be interpreted as the Banco de España's analysis of the risks and vulnerabilities included in this report, although it does make a highly useful contribution in this respect.

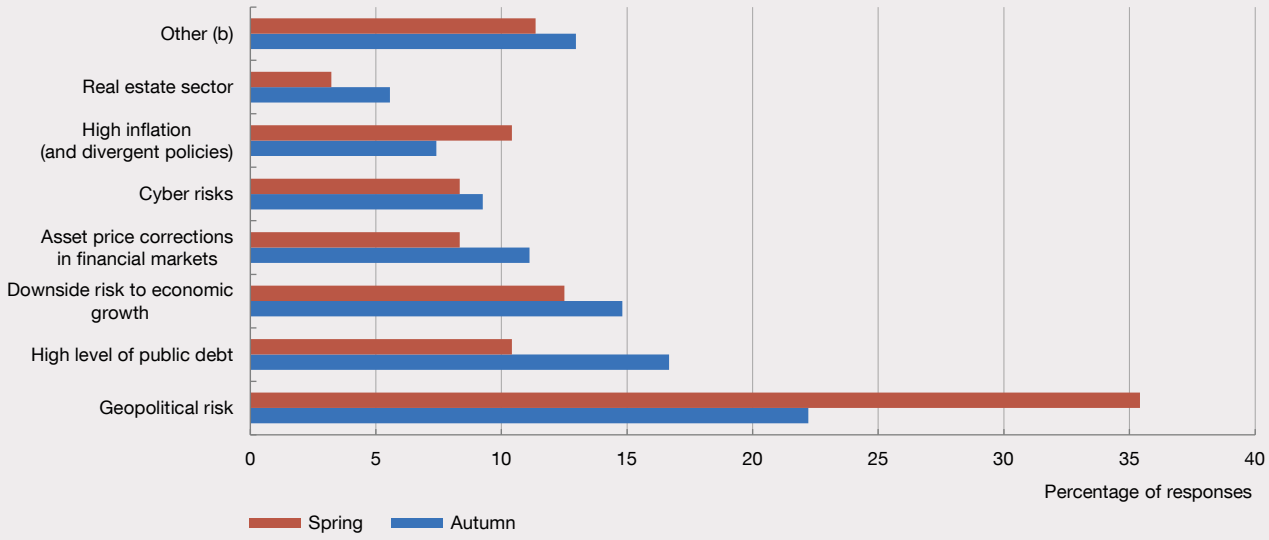
Chart 1 presents the main risks identified in this round of contacts and compares them with the results obtained six months ago. The percentage of responses identifying each factor as a current risk is shown.

The main difference in this round of contacts is the lower relative concern for geopolitical risk and the rising concern for the risk deriving from the high level of government debt. There are also more mentions of risks arising from a potential economic slowdown and from an abrupt financial market correction. However, these experts are increasingly less likely to anticipate a scenario of high and persistent inflation that could affect financial stability.

Geopolitical risk continues to be the most significant risk identified by the experts, despite the lower percentage of responses citing it. The respondents noted that the US trade policy resulted in a sharp increase in uncertainty last spring. However, this uncertainty has decreased owing to the new trade agreements reached. At the same time, other destabilising sources, such as the armed conflicts in Ukraine and the Middle East, have not spread elsewhere. However, they underscored the potential for this scenario to deteriorate rapidly, with highly uncertain consequences. The creation of a world order divided among major powers may increase the risk of incidents in the areas of trade or defence.

The risk associated with a high level of government debt in some of the main advanced economies became the second reason for concern among the experts. The respondents noted that the current US fiscal policy and the difficulties in

Chart 1
Main risks to financial stability (a)



SOURCE: Banco de España survey of chief risk officers and market analysts, sent September 2025 (autumn) and February and March 2025 (spring).

a Responses to the question: "What do you consider are the three main risks which, if they materialise, could have an adverse effect on the financial stability of the Spanish economy in the next two years?".
b "Other" includes political instability, the threat to central bank independence, technology overregulation, the increase in household and firm non-performance, climate change, the energy crisis and the increase in taxes on banks.

implementing consolidation plans in other economies may lead to escalating risk premia, despite investors now showing greater tolerance to fiscal imbalances than the years after the global financial crisis.

A third factor identified in the survey was the downside risk to economic growth. In the meetings it was noted that this risk appears to be linked to the two foregoing risks, and it was underscored that, in the case of Spain, economic growth is underpinned by factors that might be difficult to maintain in the medium term. In particular, emphasis was placed on the challenges posed by stagnant productivity and demographic factors in sustaining economic growth in the medium and long term.

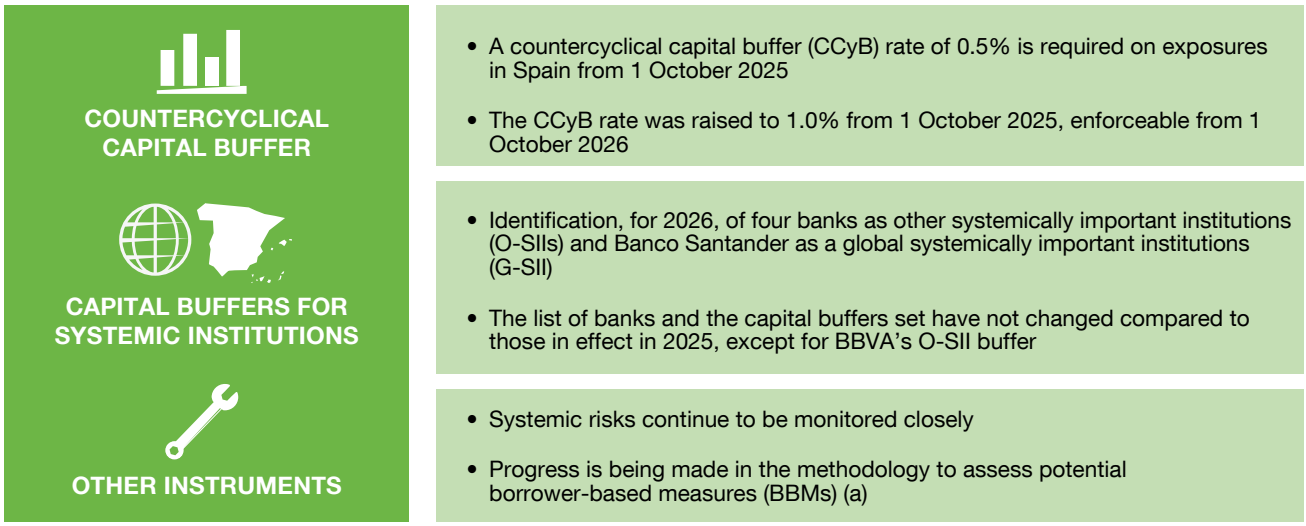
The experts also cited the risk of an abrupt financial market correction, with valuations remaining at historically high levels, which are sustained by particularly favourable expectations of the economic juncture and the potential of some technologies.

Other risks identified by many experts were (i) cyber risks, which are difficult to assess and hence remain a source of concern; (ii) high and persistent inflation; and (iii) real estate developments in Spain, due to their potential impact on growth and social cohesion. Some respondents also noted the potential risk for the financial sector posed by the surge in stablecoins and crypto-assets.

6

MACROPRUDENTIAL POLICY

Figure 6.1
Macroprudential policy



SOURCE: Banco de España.

a BBMs are regulatory limits to lending standards for loans that can be arranged in a given jurisdiction, such as caps on loan maturity or limits on the LTI or LTV ratios.

6.1 The countercyclical capital buffer

The key indicators of the countercyclical capital buffer (CCyB) monitoring framework continued to show that cyclical systemic risk in Spain stood at an intermediate level in mid-2025 (Chart 6.1.a). The four sub-indicators into which the key indicators are categorised remained at an intermediate level in June 2025 (Chart 6.1.b).[1] The output gap (one of the key indicators in the macroeconomic block) remained positive. In the indicators comprising the macro-financial block, it is noteworthy that the credit-to-GDP gap, although still negative, did show an upward trend, while the bank credit-to-GDP gap was already at a positive level (Chart 6.1.c).

The intermediate level of cyclical systemic risks underpins the recent increase of the CCyB rate to 1.0%. The activation of the CCyB at 0.5%, approved on 1 October 2024, was applicable from 1 October 2025,[2] on which date the Banco de España, having taken

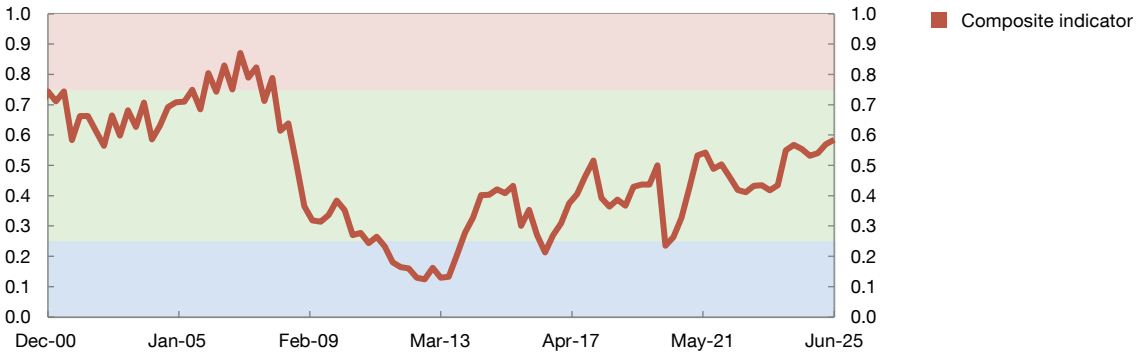
1 The key indicators can be divided into four blocks: (i) macroeconomic, (ii) macro-financial, (iii) Spanish financial markets and (iv) the Spanish banking system. The composite indicator combines information from all of them. See the Methodological framework for setting the CCyB rate in Spain for more details.

2 Failing to comply with the CCyB would entail restrictions on profit distribution, such as dividends, bonuses and share buybacks.

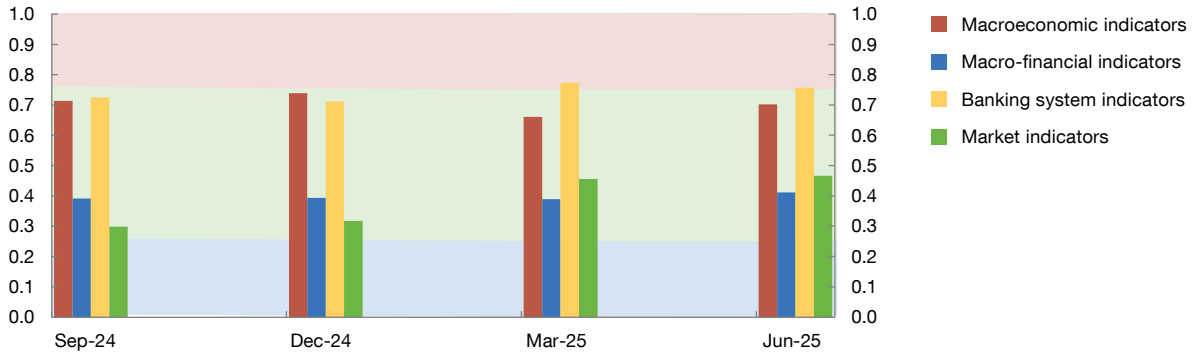
Chart 6.1

Cyclical systemic risks in Spain remained at an intermediate level in 2025 H1. The output gap remained positive and the credit-to-GDP gap continued to grow

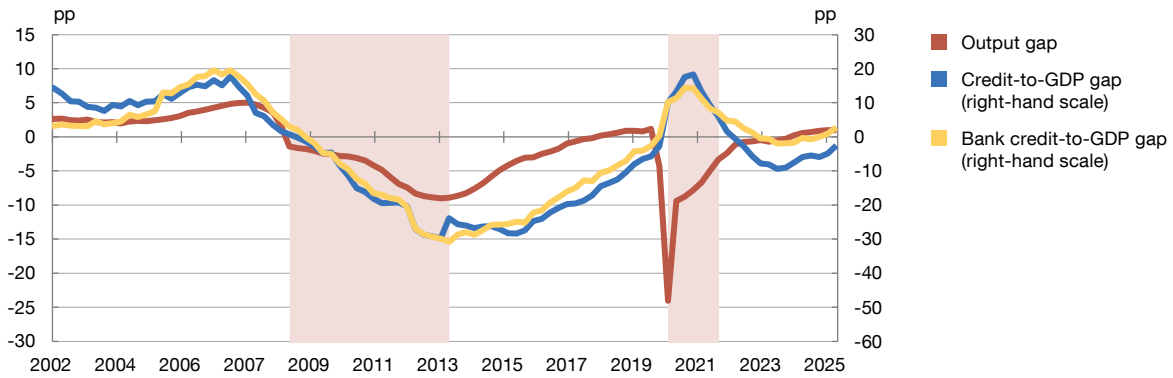
6.1.a Overall composite indicator (a)



6.1.b Composite indicators by risk category (a)



6.1.c Credit-to-GDP gap and output gap (b)



SOURCES: Banco de España, INE and Datastream. Latest observation: June 2025.

a The indicators are defined on a scale of 0 to 1 based on the percentile at which various metrics stand relative to their historical distribution. The blue-green-red range indicates a low-standard-high level signal of cyclical systemic risks.
b Note A2.6.1.1 in Annex 2.

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the required steps,[3] raised it to 1.0%.[4] This new requirement will be applicable from 1 October 2026.

6.2 Capital buffers for systemic institutions

At end-July 2025 the Banco de España designated four banks as other systemically important institutions (O-SIIs) for 2026.[5] O-SIIs are designated depending on their systemic importance for the Spanish economy. The Banco de España can also designate global systemically important institutions (G-SIIs). The primary distinction between these and O-SIIs is that the former are of systemic importance on a global scale, rather than solely at the domestic level. BBVA, CaixaBank, Banco Sabadell and Banco Santander are identified as O-SIIs for 2026, the same as for 2025. In addition, Banco Santander had already been designated (in 2024) a G-SII for 2026.[6]

The capital buffers for O-SIIs will remain unchanged in 2026 for Banco Santander, CaixaBank and Banco Sabadell, but will fall for BBVA. BBVA's systemic importance score fell below the threshold corresponding to the 1.0% buffer rate applied to it in previous years.[7] As a result, its buffer rate will decrease by 25 basis points to 0.75%.

Table 6.1
Systemically important institutions and associated capital buffers

Legal Entity Identifier	Institution	Designation (a)	Capital buffer rate in 2025 (%)	Capital buffer rate in 2026 (%)
5493006QMFDDMYWIAM13	Banco Santander, SA (b)	G-SII and O-SII	1.25	1.25
K8MS7FD7N5Z2WQ51AZ71	Banco Bilbao Vizcaya Argentaria, SA	O-SII	1.00	0.75
7CUNS533WID6K7DGFI87	CaixaBank, SA	O-SII	0.50	0.50
SI5RG2MOWQQLZCXKRM20	Banco de Sabadell, SA	O-SII	0.25	0.25

SOURCE: Banco de España.

a G-SII stands for "global systemically important institution" and O-SII for "other systemically important institution".
b The effective requirement applicable to Banco Santander, SA as a systemically important institution is the higher of the G-SII rate (1.0%) and the O-SII rate (1.25%).

3 A public notice procedure took place during July 2025 and the European Central Bank and the Spanish macroprudential authority (AMCESFI) were given advance warning of the proposal. See the press release of 8 July 2025, "The Banco de España launches the public notice procedure to increase the countercyclical capital buffer rate to 1.0% from 2025 Q4".

4 See the press release of 1 October 2025 "The Banco de España resolves to increase the countercyclical capital buffer (CCyB) rate to 1%".

5 See the press release of 30 July 2025 "The Banco de España updates the list of other systemically important institutions and sets their macroprudential capital buffer rates for 2026".

6 See the press release of 5 December 2024 "The Banco de España designates a Global Systemically Important Institution and sets its macroprudential capital buffer rate for 2026".

7 See the details on the buffer calibration frameworks for O-SIIs in the press release of 30 July 2025 "The Banco de España updates the list of other systemically important institutions and sets their macroprudential capital buffer rates for 2026".

6.3 Other macroprudential tools

As explained in previous Financial Stability Reports (FSRs), the Banco de España may establish borrower-based measures (BBMs). These limits can be set on new lending to both households and non-financial corporations. The International Monetary Fund (IMF) recently recommended that the Banco de España consider the preventive introduction of these limits on mortgages should there be signs of easing in growth or the standards associated with such lending.[8] This new recommendation comes in addition to that of the European Systemic Risk Board (ESRB) noted in the Spring 2025 FSR.[9]

Spain is one of three euro area countries that have not yet put this type of measure in place (Table 6.2). Among countries that have imposed such limits, some authorities have made use of recommendations (i.e. not mandatory), although binding measures are generally more widespread.[10]

There is a moderate degree of cross-country heterogeneity in terms of the type of measures taken. All countries that have implemented any of these measures, with the exception of France, have introduced a cap on the loan-to-value ratio (LTV). Likewise, all of these countries, except for Ireland and Luxembourg, have established a limit on either the loan service-to-income ratio (LSTI) or the debt service-to-income ratio (DSTI). Maturity limits have been introduced in most, but not all, countries that have also placed limits on the LSTI/DSTI ratio.[11] Lastly, three euro area countries have supplemented their BBMs with a sectoral systemic risk buffer relating to mortgage exposures (sSyRB). Germany has opted to use this buffer alone to cover such exposures and has adopted no mortgage BBMs.

The Banco de España is closely examining the outcome of applying this kind of measure elsewhere around the world. In particular, other European countries' experience of BBMs is proving very useful in assessing their potential application in Spain. To this end, the Banco de España staff has engaged with authorities from several countries to gain a better understanding of their experiences in the implementation of BBMs. Some of these countries have used them to curb growing vulnerabilities in their real estate markets, while others have acted pre-emptively, before lending standards loosened significantly. In the latter case, the authorities have introduced BBMs in a structural manner.

Theoretical and empirical evidence demonstrates the effectiveness of these measures under certain circumstances. An exhaustive compilation of the findings of the academic literature on the theoretical and empirical evidence of the costs and benefits of activating

8 See "Spain: 2025 Article IV Consultation-Press Release; and Staff Report", 6 June 2025.

9 See European Systemic Risk Board (2024), "Follow-up report on vulnerabilities in the residential real estate sectors of the EEA countries".

10 For instance, Belgium and Portugal have introduced their mortgage BBMs via recommendations.

11 Maturity limits are intended to disincentivise mortgage terms being lengthened excessively in an effort to comply with the limit on the DSTI ratio. For a given mortgage amount, extending the term can reduce the annual debt service. In consequence, setting a maximum limit on the term avoids there being a loophole to escape the DSTI ratio cap.

Table 6.2
Mortgage BBMs and sectoral buffers applicable to mortgages. Active measures in the euro area

Country	LTV (a)	LTI/DTI (a)	LSTI/DSTI (a)	Maturity	sSyRB (b)
Germany					✓
Austria	✓		✓	✓	
Belgium	✓	✓	✓		
Bulgaria	✓		✓	✓	
Croatia	✓		✓	✓	
Cyprus	✓		✓		
Slovakia	✓	✓	✓	✓	
Slovenia	✓		✓		
Spain					
Estonia	✓		✓	✓	
Finland	✓		✓	✓	
France			✓	✓	
Greece	✓		✓		
Ireland	✓	✓			
Italy					
Latvia	✓	✓	✓	✓	
Lithuania	✓		✓	✓	✓
Luxembourg	✓				✓
Malta	✓		✓	✓	
Netherlands	✓		✓	✓	
Portugal	✓		✓	✓	✓

SOURCE: ESRB.

a LTV = loan-to-value ratio. LTI = loan-to-income ratio. LSTI = loan service-to-income ratio. The DTI and DSTI ratios are equivalent to the LTI and LSTI ratios, respectively, but the numerator includes all of the mortgage applicant's existing debt.
b sSyRB = sectoral systemic risk buffer. A tick in this column indicates its activation for mortgage exposures.

these measures confirms their efficacy in mitigating systemic risks arising from household over-indebtedness and imbalances in the real estate market (see Box 6.1). Nevertheless, no integrated and generally accepted framework for comprehensively assessing their benefits and costs, including their general equilibrium consequences (e.g. shifts between the homeownership and rental markets, potential sectoral redistribution of income and activity and impact on consumption), has yet been identified.[12]

The Banco de España is conducting both theoretical and empirical studies to allow a detailed assessment of the implications for the Spanish economy of potentially implementing these measures. This endeavour is driven by the aforementioned absence of a comprehensive methodological framework, as well as the need for a framework specifically tailored to the Spanish economy.

12 For example, the evidence set out in Box 2.1 indicates that setting limits on mortgage lending could cut the risk of overindebtedness and encourage more stable consumption by those who finance their main residence with a mortgage. Nonetheless, such measures can also have less favourable effects, such as pushing some households towards renting their main residence under potentially stressed economic conditions, especially in environments with a tight rental market. This, in turn, could limit such households' capacity for consumption.

Quantitative theoretical models are particularly useful for this type of analysis. Once calibrated, they enable the impact of mortgage BBMs to be simulated in countries like Spain, where they have never been implemented. In addition, such approximations are especially valuable for analysing general equilibrium implications, generating metrics that assess the impact of measures on various areas, such as housing prices and affordability, household consumption and welfare, and systemic risk and financial stability.

Empirical analyses are also necessary to calibrate these instruments to the specific characteristics of each economy. These methods do not require the economy's functioning to be specified (in a simplified manner, at least), which is the main limitation of theoretical general equilibrium models. The empirical approach faces the challenge in Spain of finding events that are informative with regard to the introduction of BBMs, given that they have not been implemented nationally. For this reason, the empirical literature on the experience in other countries, as previously mentioned, can be particularly useful. Nonetheless, the Banco de España has highly detailed granular information available on the Spanish mortgage market, allowing for the assessment of aspects such as the percentage of credit and borrowers that would need to adjust their mortgage conditions under different BBM calibrations.

Box 6.1

WHAT DOES THE LITERATURE SAY ABOUT LIMITS TO MORTGAGE LENDING STANDARDS?

This box summarises a review by the Banco de España of the literature on the effects of tightening mortgage lending standards using borrower-based measures (BBMs).[1] These measures seek to contain excessive household and corporate debt, as appropriate, and to enhance banks' credit portfolio quality.

The box focuses exclusively on BBMs applied to mortgage lending, a segment that is closely associated with the build-up of systemic risk during expansionary phases of the financial cycle.[2] Since the global financial crisis such measures have become considerably more common, especially in Europe. The main types adopted are caps on mortgage lending ratios – loan-to-value (LTV), loan or debt-to-income (LTI or DTI) and loan or debt service-to-income (LSTI or DSTI) – and maximum repayment terms.

Analyses of the impact of such measures are extremely helpful to assess their potential implications should they be adopted in Spain. This box provides an overview of the results of empirical and theoretical studies on how effective BBMs are in mitigating systemic risks and their side effects.

Empirical studies on mortgage lending standards and default risk

There is extensive empirical literature on the relationship between lending standards and default risk, especially in the US and UK mortgage markets where loan and borrower-level micro data are widely available. These analyses usually assess the probability of default in terms of the LTV ratio and income-based ratios such as DTI/LTI or DSTI/LSTI, considering borrower and lender characteristics.

The initial studies in the literature considered negative equity (when the outstanding mortgage exceeds the value of the property) to be a sufficient condition for default.[3] That is, a loan would default if the LTV ratio exceeded 100% at some point during its lifetime. For this reason, a high LTV ratio at origination would increase the probability of default in the event of a drop in property prices.

However, more recent studies have shown that negative equity is not really a sufficient condition for default as generally there must also be adverse household income events.[4] Indeed, they have found that the combination of a high LTV and a high LSTI ratio significantly heightens the risk of default and that the effect is not linear, but instead increases sharply when certain thresholds are crossed.[5] In this respect, it has been found that simultaneously applying BBMs that limit LTV and income-based ratios enhances their effectiveness.[6]

Other studies that have analysed specific borrower segments have shown that buy-to-let borrowers have a higher probability of default, and that this can increase significantly if they have high LTV ratios. However, this borrower segment appears to be less sensitive to higher DSTI ratios.[7]

Lastly, in a specific study on Spain it was found that LTV ratios were less informative on default than loan-to-price (LTP) ratios during the property boom of the 2000s.[8] This

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1 Adrián Carro, Jorge E. Galán, Enric Martorell and Raquel Vegas. (2025). "A literature review on ex-ante and ex-post analysis of the implications of borrower-based macroprudential measures". Documento Ocasional, 2524, Banco de España.

2 Òscar Jordà, Moritz Schularick and Alan M. Taylor. (2016). "The great mortgaging: housing finance, crises and business cycles". *Economic Policy,* 31, pp. 107-152.

3 Kerry D. Vandell. (1995). "How Ruthless Is Mortgage Default? A Review and Synthesis of the Evidence". *Journal of Housing Research,* 6, pp. 245-264.

4 Kristopher Gerardi, Kyle F. Herkenhoff, Lee E. Ohanian and Paul S. Willen. (2018). "Can't Pay or Won't Pay? Unemployment, Negative Equity, and Strategic Default". *The Review of Financial Studies,* 31(3), pp. 1098-1131.

5 Yongheng Deng, John M. Quigley and Robert Van Order. (2000). "Mortgage Terminations, Heterogeneity and the Exercise of Mortgage Options". *Econometrica,* 68, pp. 275-307; Brent W. Ambrose, Charles A. Capone and Yongheng Deng. (2001). "Optimal Put Exercise: An Empirical Examination of Conditions for Mortgage Foreclosure". *The Journal of Real Estate Finance and Economics,* 23, pp. 213-234; Orla May and Merxe Tudela. (2005). "When is mortgage indebtedness a financial burden to British households? A dynamic probit approach". Working Papers, 277, Bank of England.

6 Andrew Haughwout, Richard Peach and Joseph Tracy. (2008). "Juvenile delinquent mortgages: Bad credit or bad economy?". *Journal of Urban Economics,* 64, pp. 246-257; Hana Hejlová, Libor Holub and Miroslav Plašil. (2021). "Calibration of Borrower-based Macroprudential Measures for Mortgage Exposures: Rigorous Approach and its Application to the Czech Republic". *Prague Economic Papers,* 30(3), pp. 316-335.

7 Vladimir Lazarov and Marc Hinterschweiger. (2018). "Determinants of distress in the UK owner-occupier and buy-to-let mortgage markets". Staff Working Papers, 760, Bank of England; Robert Kelly and Conor O'Toole. (2018). "Mortgage default, lending conditions and macroprudential policy: Loan-level evidence from UK buy-to-lets". *Journal of Financial Stability,* 36, pp. 322-335.

8 Jorge E. Galán and Matías Lamas. (2025). "Beyond the LTV Ratio: Lending Standards, Regulatory Arbitrage, and Mortgage Default". *Journal of Money, Credit and Banking,* 57, pp. 107-150.

suggests that the LTP ratio should be used to complement the LTV ratio to assess mortgage risk. Specifically, the study found that the probability of default was significantly higher among mortgages with high LTP values.

Various studies have documented unintended consequences that undermine the effectiveness of LTV caps, such as growth in unsecured lending or longer loan maturities, in countries where these measures were not accompanied by others that take these aspects into account.[9] All the above underlines the importance of implementing combined and carefully designed BBMs.

BBMs: macroeconomic and financial impact studies

Another branch of study in the literature has focused on cross-country comparisons, assessing whether, through their impact on macroeconomic and financial aggregates, limits on mortgage lending standards have effectively contained financial stability vulnerabilities.

These studies show that BBMs – and specifically LTV and DSTI caps – effectively reduce excessive growth in lending to households during expansionary phases of the financial cycle, while in crisis periods they have no significant impact.[10] This suggests that these should be structural measures, in place and unchanged throughout the credit cycle. They would then serve as an automatic safeguard against the build-up of risks in expansionary phases and would not entail effective credit restrictions in downturns.

In general, the studies find that DSTI caps tend to contain growth in mortgage lending more effectively than LTV caps. The evidence on how effective they are in smoothing house prices is mixed, but they may be relevant in specific geographical areas, as discussed in more detail below.[11] The studies also show that these effects on credit and house prices are larger when the measures implemented are legally binding (rather than mere recommendations) and that they tend to manifest with some delay, with the maximum effect being observed up to three years after implementation.[12]

In addition, some studies have delved deeper into the impact of BBMs on economic growth, finding that on average the effects are moderate.[13] However, the studies on tail risks (low probability but high intensity adverse economic environments) find that activating BBMs reduces the risks of sharp falls in GDP and credit during financial crisis events.[14]

BBMs: distributional impact studies

Extensive literature has analysed the impact of BBMs on the behaviour of borrowers and financial institutions. These studies use granular loan or borrower-level data that make it possible to identify heterogeneous effects and transmission mechanisms according to the stage of the business cycle or the institutional framework. In this respect, various studies show how BBMs have different effects on mortgage credit and house prices by geographical area within each country and by borrower type.[15]

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9 Nitzan Tzur-Ilan. (2023). "Adjusting to Macroprudential Policies: Loan-to-Value Limits and Housing Choice". *The Review of Financial Studies,* 36, pp. 3999-4044

10 C. Lim, F. Columba, A. Costa, P. Kongsamut, A. Otani, M. Saiyid, T. Wezel and X. Wu. (2011). "Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences". IMF Working Papers 238. International Monetary Fund; Stijn Claessens, Swati R. Ghosh and Roxana Mihet. (2013). "Macro-prudential policies to mitigate financial system vulnerabilities". *Journal of International Money and Finance,* 39, pp. 153-185. In crisis periods, banks themselves tend to tighten eligibility criteria, applying levels above regulatory limits, so these are not a limiting constraint.

11 Kenneth N. Kuttner and Ilhyock Shim. (2016). "Can non-interest rate policies stabilize housing markets? Evidence from a panel of 57 economies". *Journal of Financial Stability,* 26, pp. 31-44; Eugenio Cerutti, Stijn Claessens and Luc Laeven. (2017). "The use and effectiveness of macroprudential policies: New evidence". *Journal of Financial Stability,* 28, pp. 203-224.

12 Tigran Poghosyan. (2020). "How effective is macroprudential policy? Evidence from lending restriction measures in EU countries". *Journal of Housing Economics,* 49 (101694).

13 Björn Richter, Moritz Schularick and Ilhyock Shim. (2019). "The costs of macroprudential policy". *Journal of International Economics,* 118, pp. 263-282; Zohair Alam, Adrian Alter, Jesse Eiseman, Gaston Gelos, Heedon Kang, Machiko Narita, Erlend Nier and Naixi Wang. (2024). "Digging Deeper—Evidence on the Effects of Macroprudential Policies from a New Database". *Journal of Money, Credit and Banking,* 57, pp. 1135-1166. These studies find that a 10 percentage point (pp) reduction in the LTV ratio can slow credit growth by up to 6 pp over a four-year horizon.

14 Michal Franta and Leonardo Gambacorta. (2020). "On the effects of macroprudential policies on Growth-at-Risk". Economics Letters, 196 (109501); Jorge E. Galán (2024). "The benefits are at the tail: Uncovering the impact of macroprudential policy on growth-at-risk". *Journal of Financial Stability,* 74 (100831); Jorge E. Galán. (2025). "Macroprudential policy and the tail risk of credit growth". Documentos de Trabajo, 2509, Banco de España.

15 Jed Armstrong, Hayden Skilling and Fang Yao. (2019). "Loan-to-value ratio restrictions and house prices: Micro evidence from New Zealand". *Journal of Housing Economics,* 44, pp. 88-98.

- In **Ireland,** for example, it was found that introducing LTV and LTI caps gave rise to an increase in the saving rate and a reallocation of mortgage credit towards higher-income borrowers and borrowers in rural areas. Moreover, at the banks most affected by the limits, it led to portfolio shifts towards assets that were not subject to the regulations, such as securities and corporate credit.[16]

- In the **Netherlands,** studies showed that setting LTV caps reduced mortgage borrowing, house prices and default rates, especially among low-income borrowers. Although household liquidity decreased in the short term, owing to the initial increase in the housing cost burden, in the medium term households experiencing income loss benefited from lower default rates.[17]

- In the **United Kingdom** it was found that capping the LTI ratio cut lending to low-income borrowers and cooled house price growth in areas where banks were granting high-LTI loans. In addition, lower-income borrowers had lower default rates, which suggests a benefit in terms of their resilience to adverse events.[18]

- In **Denmark,** studies showed that tighter LTV ratios had a positive impact on financial stability, without significantly affecting housing affordability for households in the medium to long term.[19] Even so, in the short term, activating these measures can entail adjustment costs and can temporarily limit access to house purchase, while households accumulate the additional savings needed to make their purchase and the policy activation feeds through to lower prices.[20]

Theoretical models of BBMs and their macroeconomic impact

Recent literature has developed various macroeconomic models to analyse how BBMs affect credit dynamics, housing markets and macroeconomic stability. They are mostly theoretical general or partial equilibrium models, some of which allow for modelling of heterogeneous household behaviour.

Several of these studies have indicated that when LTV limits are eased house prices rise sharply, as the real estate risk premium declines, and that this effect is amplified in markets with little housing tenure mobility. These studies suggest that there is a feedback loop between looser LTV ratios and house prices, leading to higher prices and riskier credit conditions.

In this respect it has been found that, as looser LTV ratios drive up house prices, they also push up households' DTI ratios, and hence their DSTI ratios, with adverse effects on consumption (excluding housing expenditure) in the short term on account of the higher debt burden.[21] In the medium term, this higher borrowing would also limit household consumption in the event of a negative income shock. Accordingly, combined BBMs that limit the level of debt would have positive effects, reducing the volatility of consumption over the cycle.[22]

Some studies have also identified benefits of BBMs as a complement to bank capital measures. While capital requirements chiefly enhance banks' resilience, BBMs

16 Viral V. Acharya, Katharina Bergant, Matteo Crosignani, Tim Eisert and Fergal McCann. (2022). "The Anatomy of the Transmission of Macroprudential Policies", *The Journal of Finance,* 77(5), pp. 2533-2575.

17 Sjoerd van Bekkum, Marc Gabarro, Rustom M. Irani and José-Luis Peydró. (2024). "The real effects of borrower-based macroprudential policy: Evidence from administrative household-level data". *Journal of Monetary Economics,* 147 (103574).

18 José-Luis Peydró, Francesc Rodriguez-Tous, Jagdish Tripathy and Arzu Uluc. (2024). "Macroprudential Policy, Mortgage Cycles, and Distributional Effects: Evidence from the United Kingdom". *The Review of Financial Studies,* 37(3), pp. 727-760.

19 Graeme Cokayne, Eddie Gerba, Andreas Kuchler and Rasmus P. Roulund. (2024). ""Thank me later": Why is (macro)prudence desirable?". *Journal of Financial Stability,* 71 (101227).

20 Anthony A. Defusco, Stephanie Johnson and John Mondragon. (2020). "Regulating Household Leverage". The Review of Economic Studies, 87(2), pp. 914-958; Daniel Abreu, Sónia Félix, Vitor Oliveira and Fátima Silva. (2024). "The impact of a macroprudential borrower-based measure on households' leverage and housing choices". *Journal of Housing Economics,* 64 (101995); Francesco G. Caloia (2024). "Borrower-based measures, house prices and household debt". *Journal of International Money and Finance,* 143 (103051); Martin Hodula, Martin Melecký, Lukáš Pfeifer and Milan Szabo. (2023). "Cooling the mortgage loan market: The effect of borrower-based limits on new mortgage lending". *Journal of International Money and Finance,* 132 (102808).

21 Marcus M. Ingholt. (2022). "Multiple Credit Constraints and Time-Varying Macroeconomic Dynamics". *Journal of Economic Dynamics and Control,* 143 (104504).

22 Andrea Ferrero, Richard Harrison and Benjamin Nelson. (2024). "House Price Dynamics, Optimal LTV Limits and the Liquidity Trap". *The Review of Economic Studies,* 91(2), pp. 940-971; Graeme Cokayne, Eddie Gerba, Andreas Kuchler and Rasmus P. Roulund. (2024). ""Thank me later": Why is (macro)prudence desirable?". *Journal of Financial Stability,* 71 (101227).

improve households' resilience. Specifically, a combination of structural BBMs with time-variant capital measures (such as countercyclical buffers) would have positive effects on financial stability.[23]

Another branch of this literature has studied how these measures interact with monetary policy, finding that they are complementary. Specifically, these studies find that DSTI caps help contain the negative effects of monetary policy tightening on households' debt servicing.[24] They also highlight that LTV caps reduce household indebtedness, thereby helping to stabilise credit cycles, which is not achieved by monetary policy alone.[25]

Some models enable analysis of the distributional effects of BBMs. Some of these studies find that LTV and LTI caps curb house price growth but push up rentals, negatively affecting young people and middle-income households, although these groups would benefit from smaller declines in consumption during crisis periods.[26] When these models have been applied to Spain, it has been found that very loose pre-crisis mortgage lending conditions, followed by an abrupt shift during a crisis, are correlated with lower housing affordability and lower consumption among young borrowers.[27] In this setting, BBMs would help mitigate the negative effects of a crisis on vulnerable groups.

Lastly, recent literature has used agent-based models (ABMs) to make detailed simulations of the impact of BBMs on mortgage and housing markets. These models simulate the behaviour of individual agents (such as households, banks or firms), accurately adapting to their real distributions and incorporating realistic lifecycle, rental market and buy-to-let dynamics.

Studies conducted for various countries have shown that BBMs reduce debt, credit risk and the probability of default, although the impact is greater on first-time buyers and they can have indirect effects on the rental market. The literature also stresses the importance of BBMs being calibrated to consider the joint distribution of risks and the interaction between measures.[28]

Evidence on BBMs: main conclusions

The literature reviewed provides evidence of BBMs' effectiveness in mitigating systemic risks stemming from household over-indebtedness and property market imbalances. The empirical studies show that stricter lending standards (especially LTV and DSTI caps) significantly reduce the probability of default, dampen credit growth in expansionary phases and strengthen the resilience of the financial system. They also show that a combination of BBMs applied simultaneously is more effective and reduces any unintended consequences of the measures.

Moreover, the theoretical models available show that BBMs help stabilise credit cycles, reduce the probability of crisis and mitigate negative effects on well-being, especially during economic and financial downturns. However, they also warn of redistributive effects relating to reallocation of credit to less restricted borrowers and rent increases (Figure 1).

All the above demonstrates how effective these measures are under certain circumstances, although the available evidence is heterogeneous. It also suggests that they be applied flexibly and be continuously assessed using granular data and advanced models. According to the previous studies analysed, this would maximise their effectiveness and minimise their costs.

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23 L. Herrera. (2025). "Building up financial resilience: The role of borrower-based macroprudential policies". Documentos de Trabajo, Banco de España, forthcoming.

24 Daniel Greenwald. (2018). "The Mortgage Credit Channel of Macroeconomic Transmission". Research Paper 5184, MIT Sloan School of Management.

25 Sami Alpanda and Sarah Zubairy. (2017). "Addressing household indebtedness: Monetary, fiscal or macroprudential policy?". *European Economic Review,* 92, 47-73; Jiaqian Chen, Daria Finocchiaro, Jesper Lindé and Karl Walentin. (2023). "The costs of macroprudential deleveraging in a liquidity trap". *Review of Economic Dynamics,* 51, pp. 991-1011

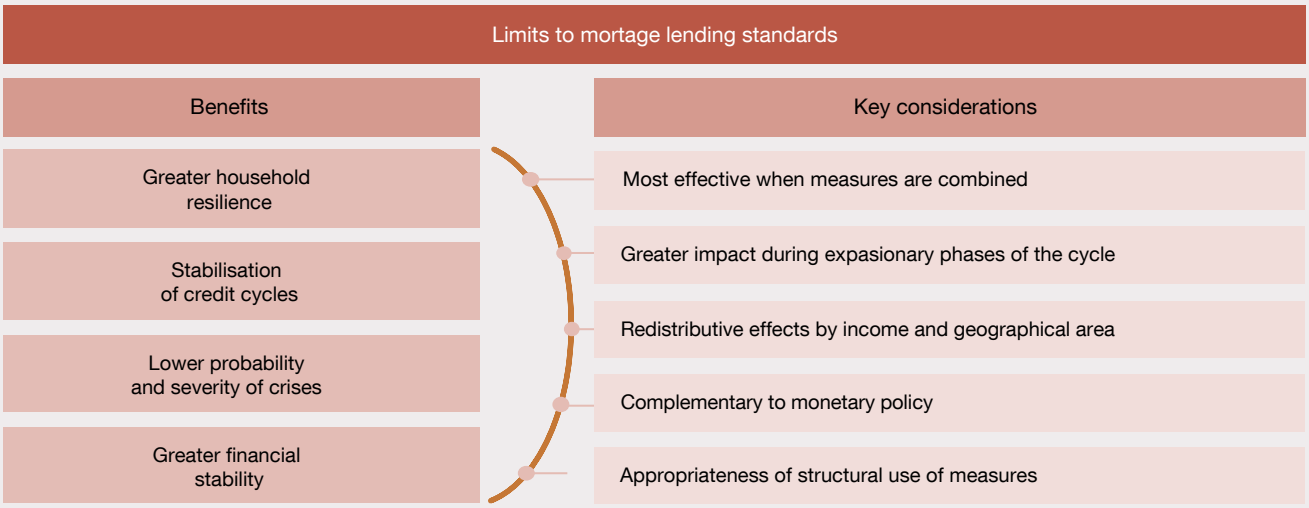
26 Juan Castellanos, Gonzalo Paz-Pardo and Andrew Hannon. (2024). "The aggregate and distributional implications of credit shocks on housing and rental markets". ECB Working Paper, 2977, European Central Bank.

27 Clodomiro Ferreira, Julio Gálvez and Myroslav Pidkuyko. (2024). "Housing tenure, consumption and household debt: life-cycle dynamics during a housing bust in Spain". Documentos de Trabajo, 2424, Banco de España.

28 Rafa Baptista, J. Doyne Farmer, Marc Hinterschweiger, Katie Low, Daniel Tang and Arzu Uluc. (2016). "Macroprudential policy in an agent-based model of the UK housing market". Staff Working Papers, 619, Bank of England; Adrian Carro. (2023). "Taming the housing roller coaster: The impact of macroprudential policy on the house price cycle". *Journal of Economic Dynamics and Control,* 156 (104753).

In any event, although the existing literature is a very useful guide, no generally accepted and integrated framework has been identified for conducting a comprehensive cost-benefit analysis of these measures, particularly their general equilibrium effects on the economy. Moreover, any potential application in Spain requires additional studies, such as those under way at the Banco de España, including in their assessment Spain's structural characteristics and economic juncture.

Figure 1
Benefits of BBMs and key considerations in the literature



SOURCE: Devised by authors drawing on the literature reviewed.

Annex 1 CONSOLIDATED BALANCE SHEET AND INCOME STATEMENT

Table A1.1
Consolidated balance sheet. Deposit institutions (a)

Assets	Jun-25	Change Jun-25/Jun-24	% of total assets Jun-24	% of total assets Jun-25
	€m	%	%	%
Cash and balances at central banks	388,742	1.9	9.1	8.9
Loans and advances to credit institutions	324,897	7.9	7.2	7.5
General government	119,727	7.7	2.7	2.7
Other private sectors	2,405,188	1.4	56.6	55.2
Debt securities	668,260	6.3	15.0	15.3
Other equity instruments	42,924	3.6	1.0	1.0
Investments	19,735	-11.8	0.5	0.5
Derivatives	127,910	0.0	3.1	2.9
Tangible assets	52,920	-6.5	1.4	1.2
Other	210,387	41.2	3.6	4.8
Total assets	**4,360,704**	**4.1**	**100.0**	**100.0**
MEMORANDUM ITEMS				
Financing to private sector	2,476,546	1.6	58.2	56.8
Financing to general government	666,006	6.2	15.0	15.3
Total NPLs	78,255	-5.9	2.0	1.8
Total NPL ratio	2.1	-22 (b)		

Liabilities and equity	Jun-25	Change Jun-25/Jun-24	% of total assets Jun-24	% of total assets Jun-25
	€m	%	%	%
Balances from central banks	51,778	-27.5	1.7	1.2
Deposits from credit institutions	322,328	10.8	6.9	7.4
General government	241,972	25.6	4.6	5.5
Other private sectors	2,557,606	0.8	60.6	58.7
Marketable debt securities and subordinated debt	504,390	0.9	11.9	11.6
Derivatives	108,936	-4.3	2.7	2.5
Provisions (including for pensions)	20,463	-4.0	0.5	0.5
Other	262,670	39.8	4.5	6.0
Total liabilities	**4,070,144**	**3.9**	**93.4**	**93.3**
MEMORANDUM ITEM				
Eurosystem net lending (a)	17	-99.0	0.0	0.0
Own funds	334,618	5.4	7.6	7.7
Minority interests	12,688	8.3	0.3	0.3
Valuation adjustments	-56,746	4.1	-1.3	-1.3
Total equity	**290,560**	**5.8**	**6.6**	**6.7**
Total liabilities and equity	**4,360,704**	**4.1**	**100.0**	**100.0**

SOURCE: Banco de España.

a Difference between funds received in liquidity-providing operations and funds delivered in liquidity-absorbing operations. June 2025 data.
b Difference calculated in basis points.

Table A1.2

Consolidated income statement. Deposit institutions (a)

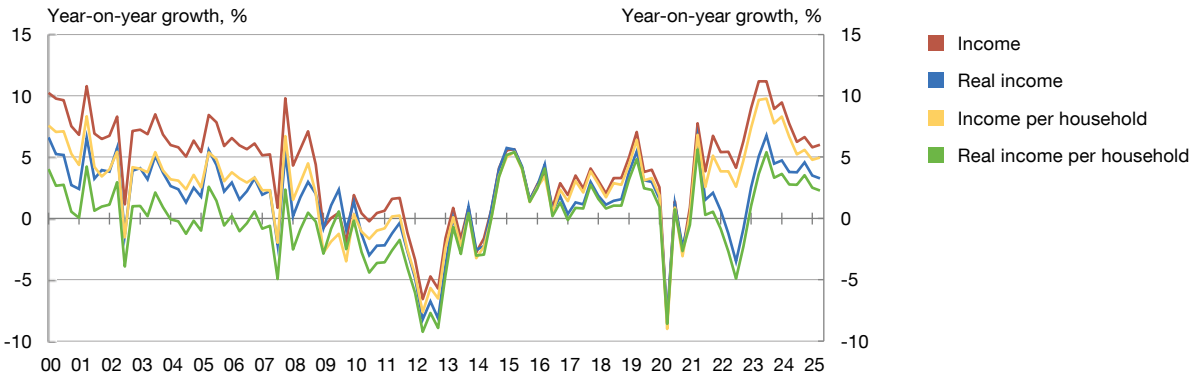
	Jun-25		Jun-24	Jun-25
	€m	% change Jun-25/Jun-24	% ATA	% ATA
Interest income	107,423	-8.8	5.65	4.96
Interest expense	58,122	-10.6	3.12	2.68
Net interest income	49,302	-6.6 (-3.7)	2.53	2.28
Return on equity instruments	944	0.5	0.05	0.04
Net financial income	50,246	-6.4 (-3.6)	2.57	2.32
Net fees and commissions	16,892	2.3 (4.4)	0.79	0.78
Gains and losses on financial assets and liabilities	2,644	-21.6 (-20.5)	0.16	0.12
Other operating income (net)	-576	—	-0.17	-0.03
Gross income	69,206	-1.2 (1.4)	3.36	3.20
Operating expenses	30,682	-0.5 (1.1)	1.48	1.42
Net operating income	38,524	-1.7 (1.7)	1.88	1.78
Impairment losses on financial assets	10,813	-1.4 (-0.3)	0.53	0.50
Other provisioning expense (net)	1,774	-29.8	0.12	0.08
Other gains or losses (net)	3,228	134.6	0.07	0.15
Profit before tax (including discontinued operations)	29,166	7.7	1.30	1.35
Net profit	21,067	10.5	0.91	0.97
MEMORANDUM ITEM				
Profit attributable to the controlling entity	20,069	9.8	0.88	0.93

SOURCE: Banco de España.

a In 2025 H1 a significant institution announced the agreement to sell a subsidiary abroad. Under IFRS 5, the institution classified the business concerned as "non-current assets/liabilities held for sale" and its results were recorded under a single heading in the consolidated income statement ("Profit or loss from discontinued operations (net)"), therefore excluding them from the heading-by-heading breakdown of the continuing operations. For analytical purposes, the year-on-year change was included in brackets in the second column for the main variables for which information is available, after adding the amounts from this subsidiary's activity in 2025 H1 to the amounts for June 2025.

A2.2.1 Households

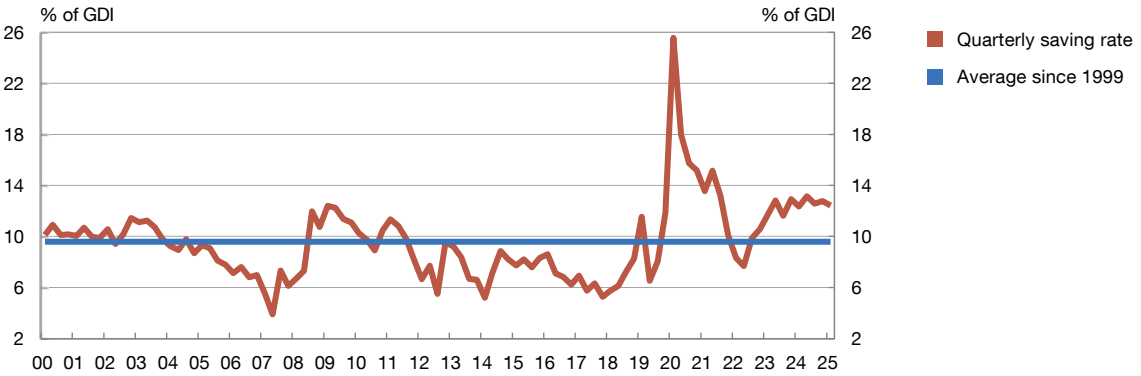
Chart A2.2.1.1
Spanish household income (a)



SOURCES: INE and Banco de España. Latest observation: 2025 Q2.

a Gross disposable income in the National Accounts includes compensation of employees, gross operating surplus, gross mixed income, property income and net taxes paid (which are deducted). Real income is adjusted for inflation using the consumption deflator.

Chart A2.2.1.2
Household saving rate in Spain (a)



SOURCES: Eurostat, INE and Banco de España. Latest observation: 2025 Q2.

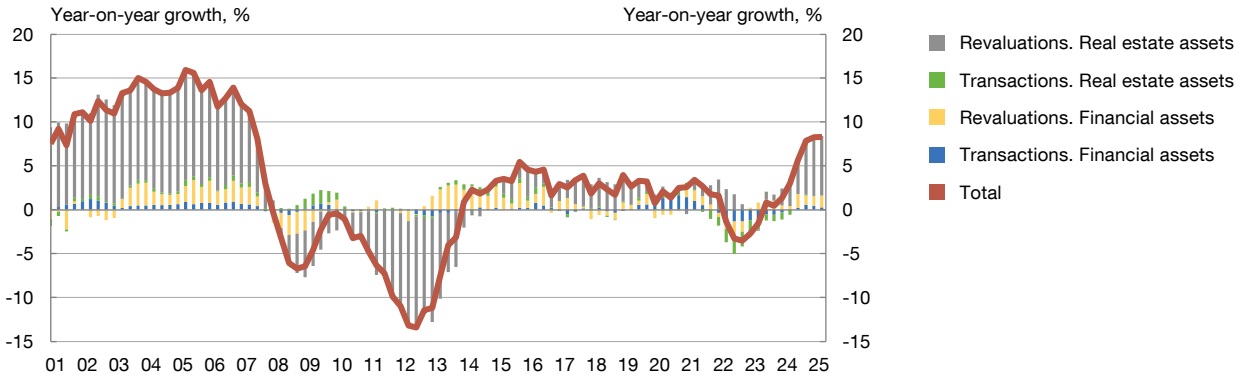
a Quarterly data seasonally adjusted.

Note A2.2.1.3 (relates to Chart 2.2 in Section 2.1)

c Estimated drawing on the 2022 EFF, under the assumption that the change in the 1-year EURIBOR (average for the year) between 2022 and 2025 (114 bp) is passed through in full to the cost of variable rate debt and that the level of debt remains constant and equal to the 2022 level. The impact of inflation is added, updating the various expenditure components with the HICP. Inflation between 2022 and 2025 relating to food, utilities and rental of main residence is 18.4%, -4.5% and 6.4%, respectively. It is assumed that each household's income increases in line with changes in the National Accounts and is distributed across income quintiles as shown in the results of the Household Budget Survey.

Chart A2.2.1.4

Real gross household wealth in Spain (a)

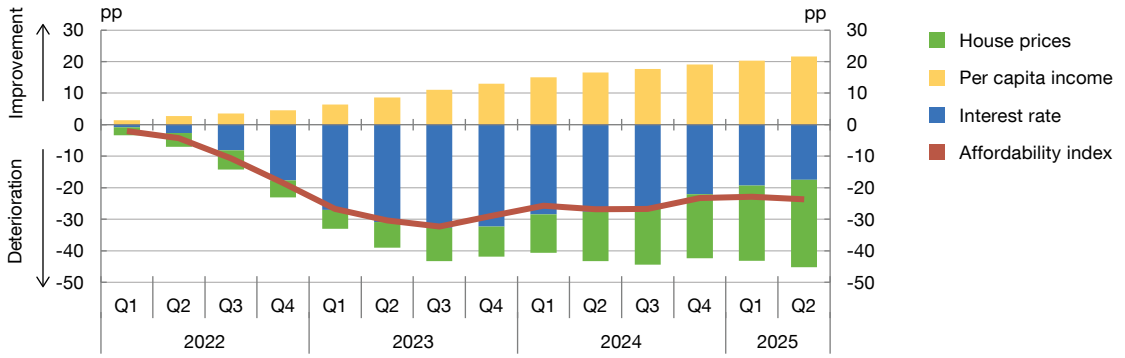


SOURCES: INE and Banco de España. Latest observation: 2025 Q2.

a The wealth metric used is gross (value of all assets without deducting liabilities) and the data are deflated with a consumption deflator. The transaction series reflect changes in household wealth due to these transactions (for example, purchases and sales of assets), while the revaluation series reflect changes in the value of households' asset holdings.

Chart A2.2.1.5

Home ownership affordability. Cumulative change since end-2021. Spain (a) (b)



SOURCES: Eurostat, ECB and Banco de España. Latest observation: 2025 Q2.

a Affordability index calculated following the methodology used in the Atlanta Fed's HOAM Index. The change in the index and its components is expressed in percentage points of the change in their respective logarithms. 2021 Q4 = 100.
b House prices are measured with the House Price Index, per capita income is the average per capita GDI in the last four quarters and the interest rate is the cost of new loans to households for house purchase.

A2.2.2 Non-financial corporations

Chart A2.2.2.1

Gross operating profit of non-financial corporations in Spain (a)

SOURCES: AEAT and Banco de España. Latest observation: 2025 H1.

a GOP is calculated as turnover - purchases - wages. Adjusted for calendar effect.
b Excluding education, health, general government, recreation activities, financial and insurance institutions, and other services. The data source is the AEAT, except for electricity, gas, steam and air conditioning supply, manufacture of coke and refined petroleum products and wholesale of solid, liquid and gaseous fuels and related products for which the data source is the CBQ.
c Includes transportation and storage; information and communication; professional, scientific and technical activities; and administrative and support service activities.
d Includes mining and quarrying, and electricity, gas and water.

Note A2.2.2.2 (relates to Chart 2.5 in Section 2.2)

c Estimated data. Aggregate financial costs by sector (at NACE Rev. 2 division level) are approximated under the assumption that the 118.3 bp decline in the 3-month EURIBOR (average for the year) between 2023 and 2025 is passed through in full to the average cost of debt and that interest-bearing debt variations mirror bank credit changes in each sector according to the CCR. It is assumed that changes in the GOS are the same those observed by sector in the AEAT data (or CBQ data for sectors not available in the AEAT). Further, holding companies, head offices, sectors not dealt with by the AEAT and dormant firms are excluded, as are firms with misreported data concerning financial costs or interest-bearing debt.e.

A2.2.3 General government in Spain

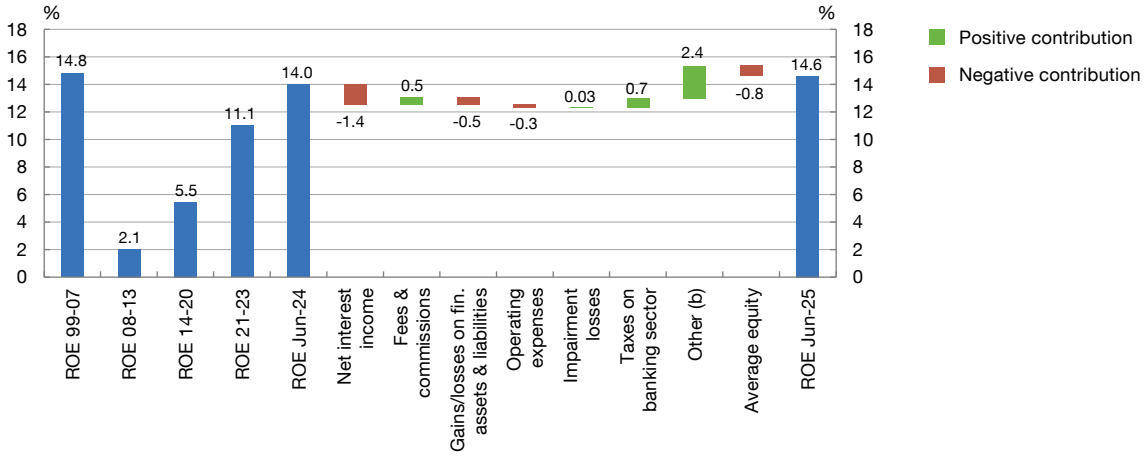
All relevant charts pertaining to this section are included in Section 2.3 of the FSR.

A2.3.1 Banking sector

A2.3.1.1 Profitability

Chart A2.3.1.1.1

Breakdown of change in return on equity (ROE). Consolidated data (a)

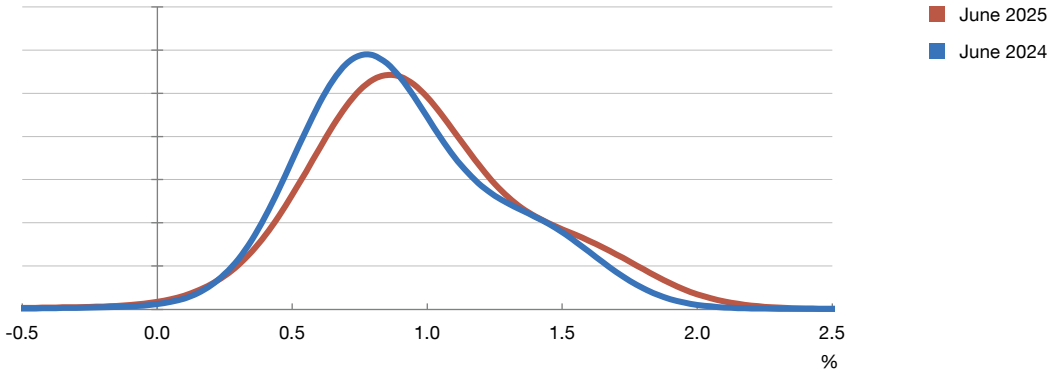


SOURCES: Banco de España and public financial reports. Latest observation: June 2025.

a The green (red) colour of the bars denotes a positive (negative) contribution of the corresponding item to the change in ROE at June 2025 compared with June 2024. The averages of the previous periods (1999 to 2023) are calculated as the average annual ROE of each period. The data in each of the different income items include in June 2025 the amounts of the business affected by the sale of a significant institution's subsidiary abroad (they are not grouped together under a single heading of profit or loss from discontinued operations). Consequently, the comparison of ROE components between the two periods is not distorted.
b It includes, among other items, dividend income, share of profit or loss of institutions accounted for using the equity method, other operating income, provisioning expense (other than for impairment losses), corporate income tax and other income.

Chart A2.3.1.1.2

Distribution of return on assets by bank. Consolidated data (a)



SOURCES: Banco de España and public financial reports. Latest observation: June 2025.

a The chart shows ROA density for Spanish banks (weighted by consolidated average total assets). The density function is estimated using a kernel estimator, which provides a non-parametric estimate, yielding a continuous, smoothed graphical representation of the function.

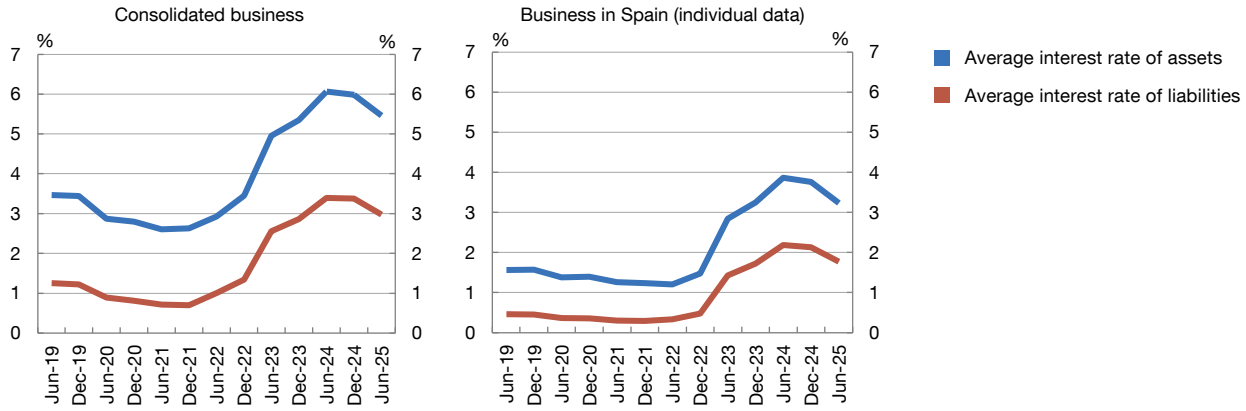
Note A2.3.1.1.3 (relates to Chart 3.1 in Section 3.1.1)

a The green (red) colour of the bars denotes a positive (negative) contribution of the corresponding item to the change in annualised ROA at June 2025 compared with June 2024. The averages of the previous periods (1999 to 2023) are calculated as the average annual ROA of each period. In June 2025 the data in each of the different income items include the amounts of the business affected by the sale of a significant institution's subsidiary abroad (they are not grouped together under a single heading of profit or loss from discontinued operations). Consequently, the comparison of ROA components between the two periods is not distorted.

b It includes, among other items, dividend income, share of profit or loss of institutions accounted for using the equity method, other operating income, provisioning expenses (other than for impairment losses), corporate income tax and other income.

Chart A2.3.1.1.4

Average interest rates of financial assets and liabilities (a)



SOURCES: Banco de España, Capital IQ and public financial reports. Latest observation: June 2025.

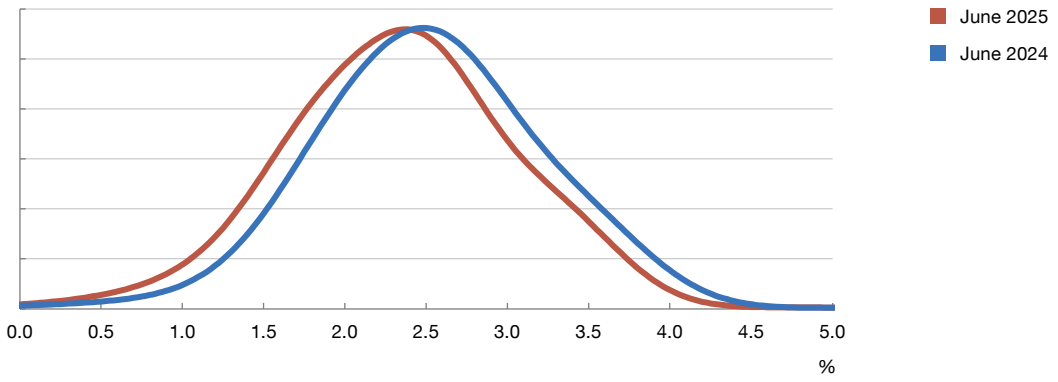
a The average interest rate of financial assets is calculated as the ratio of interest income to earning financial assets, whereas the average interest rate of financial liabilities is calculated as the ratio of interest expenses to interest-bearing financial liabilities. Note that the denominator of the average interet rate of liabilities in this chart is interest-bearing financial liabilities (unlike Chart 3.10 where the denominator is total assets).

Note A2.3.1.1.5 (relates to Chart 3.2 in Section 3.1.1)

a The quantity effect is calculated as the product of the change in investments (in the case of income) or funding (in the case of expenses) and the return (income) or cost (expenses) held constant at the values of the initial period. The price effect is calculated as the product of the change in return (income) or cost (expenses) and the investments (income) or funding (expenses) held constant at values of the initial period. The mixed effect is a residual calculated as the difference between the total change and the sum of the price and quantity effects. The effects on net interest income are calculated as the difference between the effects on interest income and interest expense. The figures include the amounts of the business affected by the sale of a significant institution's subsidiary abroad. The comparison of the change in net interest income between the two periods is therefore performed using consistent concepts.

Chart A2.3.1.1.6

Distribution by bank of net interest income as a percentage of average total assets (ATA). Consolidated data (a)

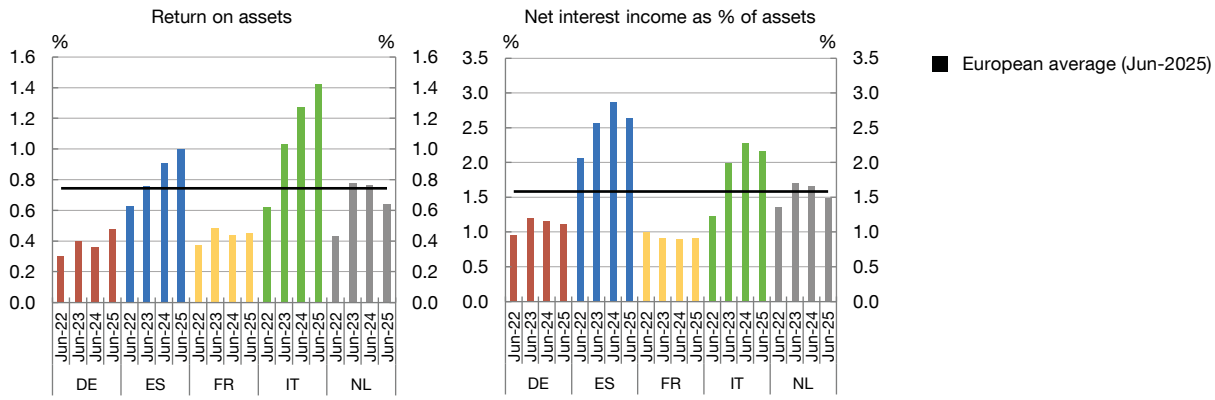


SOURCES: Banco de España, Capital IQ and public financial reports. Latest observation: June 2025.

a The chart shows the density of net interest income as a percentage of average total assets for Spanish banks (weighted by consolidated average total assets). The density function is estimated using a kernel estimator, which provides a non-parametric estimate, yielding a continuous, smoothed graphical representation of the function.

Chart A2.3.1.1.7

European comparison of return on assets and net interest income as a percentage of assets. Consolidated data



SOURCE: EBA. Latest observation: June 2025.

A2.3.1.2 Solvency

Note A2.3.1.2.1 (relates to Chart 3.4 in Section 3.1.2)

a The CET1 ratio is calculated as the ratio of CET1 to RWAs. RWAs can be calculated as total assets x density, where density is calculated as the ratio of RWAs to total assets. Therefore, in the chart, the change in the CET1 ratio is broken down into the change in CET1, in total assets and in density. There is a residual mixed effect stemming from the breakdown that is allocated proportionately to the absolute value of the changes in the factors depicted. The green (red) bars denote positive (negative) contributions from components. In Spain, the Basel III capital requirements were introduced in 2014 and the information about the CET1 ratio became available for the first time that year.

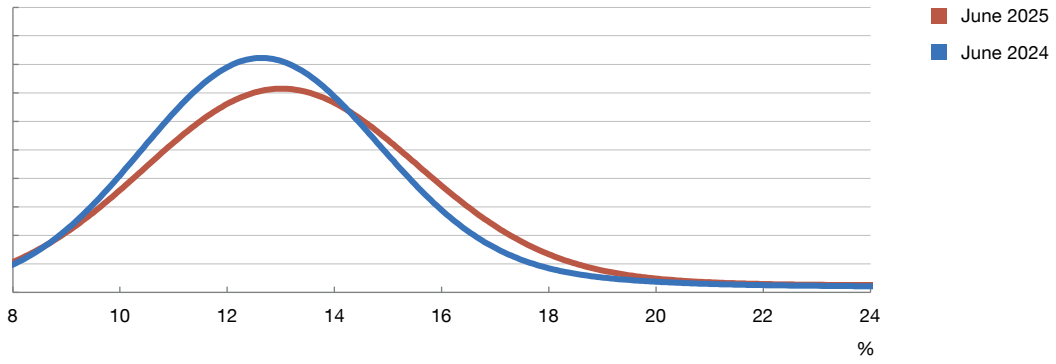
b The leverage ratio is calculated as the ratio of Tier 1 capital (T1) to total exposure. In the chart, the change in the leverage ratio is broken down into the change in T1 and total exposure. There is a residual mixed effect stemming from the breakdown that is allocated proportionately to the absolute value of the changes in the factors depicted. The green (red) bars denote positive (negative) contributions from components. Reporting of the leverage ratio began in September 2016.

c In Spain, the Basel III capital requirements were introduced in 2014 and the information about the CET1 ratio became available for the first time that year.

d In 2014 and 2015 the Tier 1 and CET1 ratios coincide because of the effect of applying the phase-in rules in force in those years to the balance sheet and capital position of Spanish banks. Both ratios are presented "phased-in". In other words, they are calculated at each date by applying the corresponding phase-in rules from the post-crisis capital requirements reforms, and not by applying the fully loaded approach at each date.

Chart A2.3.1.2.2

Distribution by bank of the CET1 ratio. Consolidated data (a)

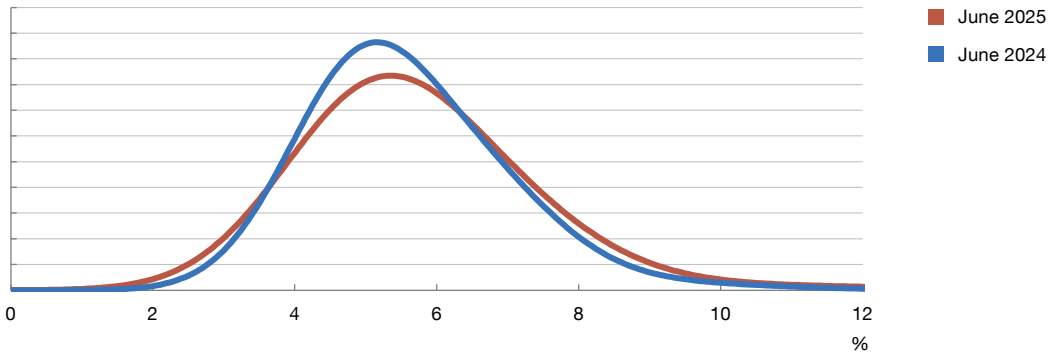


SOURCE: Banco de España. Latest observation: June 2025.

a The chart shows CET1 ratio density for Spanish banks (weighted by consolidated total assets). The density function is estimated using a kernel estimator, which provides a non-parametric estimate, yielding a continuous, smoothed graphical representation of the function.

Chart A2.3.1.2.3

Distribution by bank of the leverage ratio. Consolidated data (a)

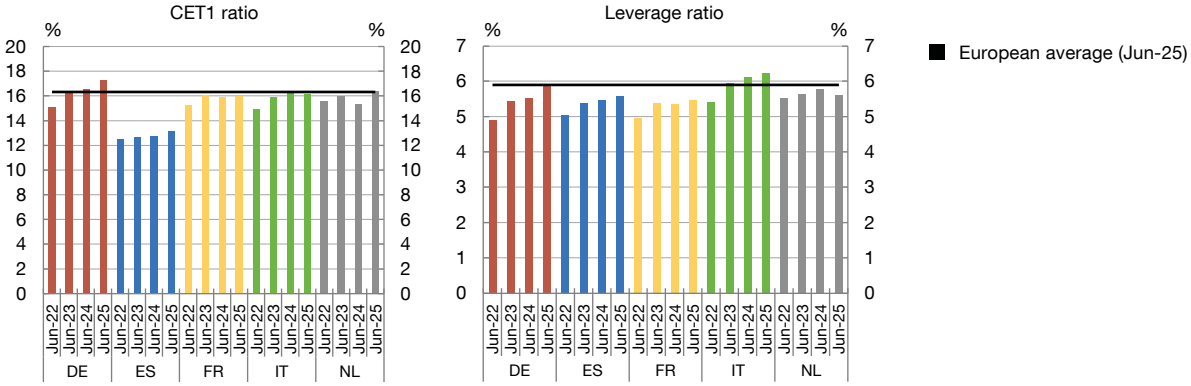


SOURCE: Banco de España. Latest observation: June 2025.

a The chart shows the leverage ratio density for Spanish banks (weighted by consolidated total assets). The density function is estimated using a kernel estimator, which provides a non-parametric estimate, yielding a continuous, smoothed graphical representation of the function.

Chart A2.3.1.2.4

European comparison of the CET1 and leverage ratios. Consolidated data

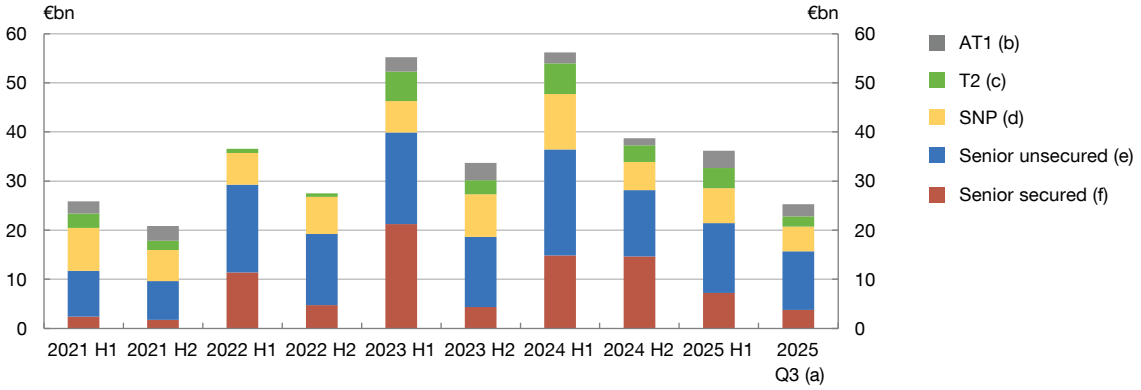


SOURCE: EBA. Latest observation: June 2025.

A2.3.1.3 Consolidated balance sheet

Chart A2.3.1.3.1

Half-yearly primary market issuance volume



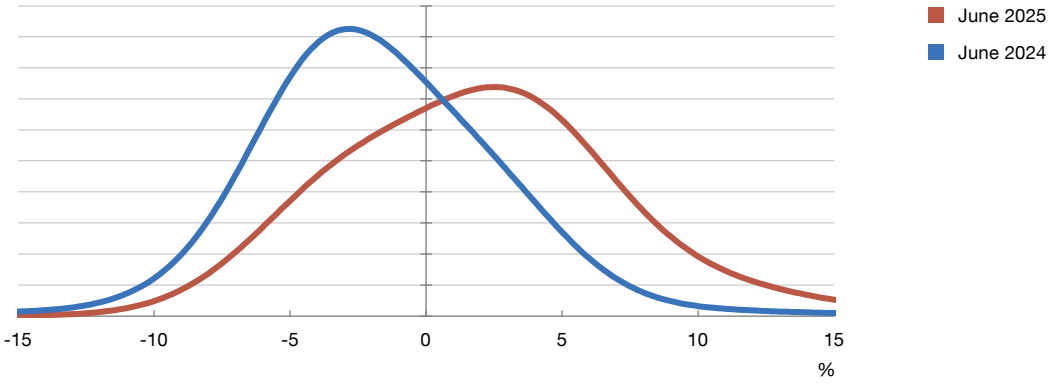
SOURCES: CSDB and LSEG Workspace. Latest observation: 30 September 2025.

a The latest period of data (2025 Q3) includes only issuances in 2025 Q3.
b Instruments eligible as Additional Tier 1 capital (AT1) are contingent convertible bonds (CoCos), which can be converted into shares and have the characteristics of both debt and equity. They are perpetual, with the issuer entitled to cancel interest payments at its discretion and redeem the bond after five years. They may be used to recapitalise the bank, for example if its capital falls below a certain level.
c Subordinated debt instruments eligible as Tier 2 capital are less risky for investors and differ from AT1 instruments in that they have a maturity date (which must be longer than five years) and the issuer is obliged to pay the stipulated interest. These instruments also have loss-absorption capacity in the event of insolvency.
d Senior non-preferred debt is a class of debt whose holders would incur losses in the event of the bank's resolution, ranking below traditional senior debt holders in priority.
e Senior unsecured debt is not backed by any specific asset, but its senior status grants it highest priority among unsecured issuances for repayment in case of issuer bankruptcy.
f Senior secured debt (including *cédulas hipotecarias,* a type of covered bond) comes with additional collateral, typically a pool of mortgage loans (as in the case of *cédulas hipotecarias),* providing the holder with dual recourse: a claim on the issuing bank itself and a priority claim against the cover pool.

A2.3.1.4 Credit

Chart A2.3.1.4.1

Distribution by bank of the year-on-year rate of change in loans to households, firms and the self-employed resident in Spain. Business in Spain. Individual data (a) (b)



SOURCE: Banco de España. Latest observation: June 2025.

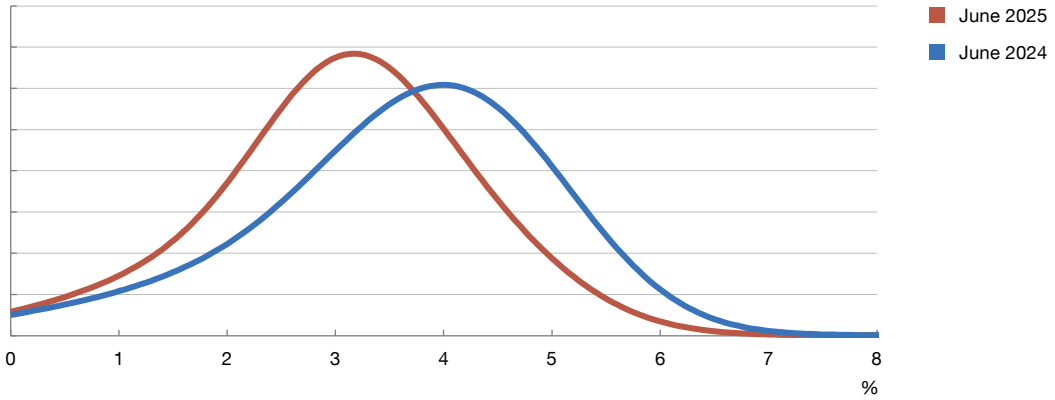
a Lending by deposit institutions' branches in Spain.
b The chart shows the density function for the year-on-year rate of change in Spanish deposit institutions' loans to households, firms and the self-employed, weighted by total assets. The density function is estimated using a kernel estimator, which provides a non-parametric estimate, yielding a continuous, smoothed graphical representation of the function.

Note A2.3.1.4.2 (relates to Chart 3.7 in Section 3.1.4)

a The firms and self-employed categories denote the institutional sectors of NFCs and sole proprietors, respectively.
b The momentum indicator shows the annualised quarter-on-quarter rate of change in the three-month moving average of the seasonally adjusted credit stock.
c Includes lending to the resident private sectors in Spanish and euro area banks' domestic business.

Chart A2.3.1.4.3

Distribution by bank of the NPL ratio for households, firms and the self-employed resident in Spain. Business in Spain. Individual data (a) (b)



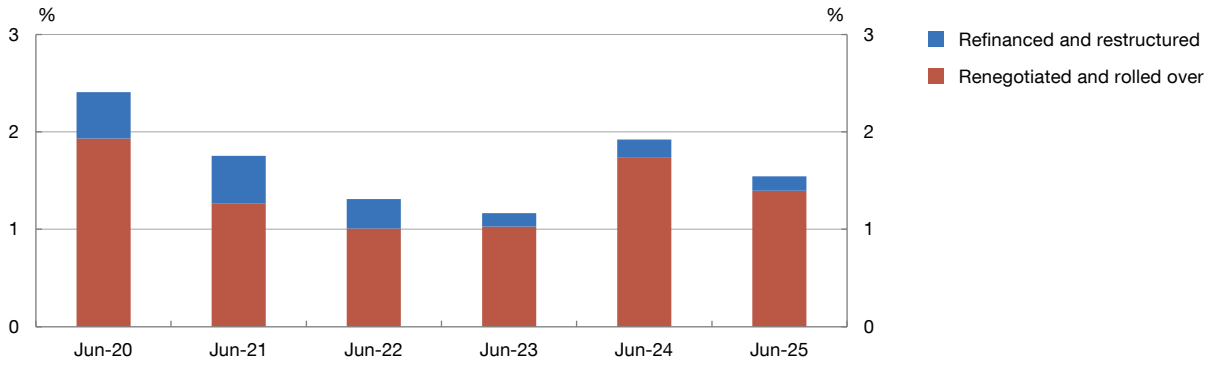
SOURCE: Banco de España. Latest observation: June 2025.

a Lending by deposit institutions' branches in Spain.
b The chart shows the density function of the NPL ratio for Spanish deposit institutions, weighted by total assets. The density function is estimated using a kernel estimator, which provides a non-parametric estimate, yielding a continuous, smoothed graphical representation of the function.

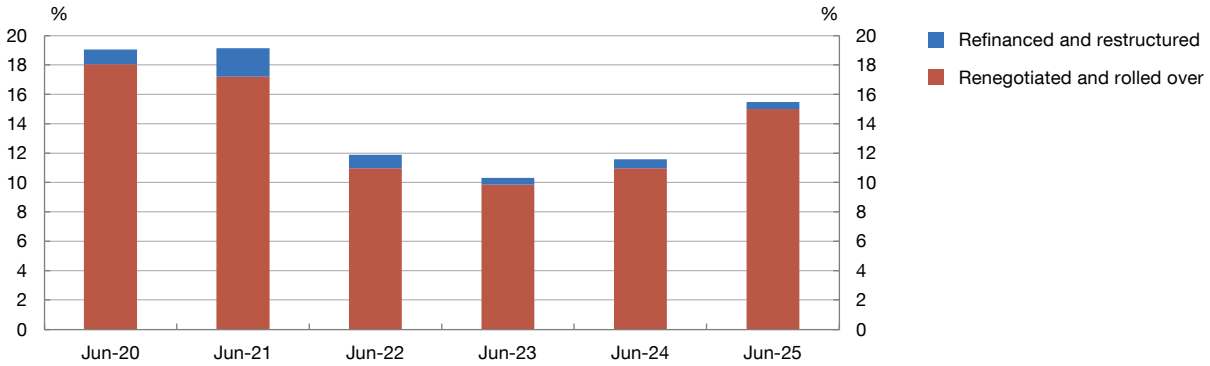
Chart A2.3.1.4.4

Cumulative 12-month flows of refinancing, restructuring, renegotiations and roll-overs

A2.3.1.4.4.a Cumulative 12-month flow of refinancing, restructuring, renegotiations and roll-overs (a). Households. Business in Spain. ID



A2.3.1.4.4.b Cumulative 12-month flow of refinancing, restructuring, renegotiations and roll-overs (a). NFCs and sole proprietors. Business in Spain. ID

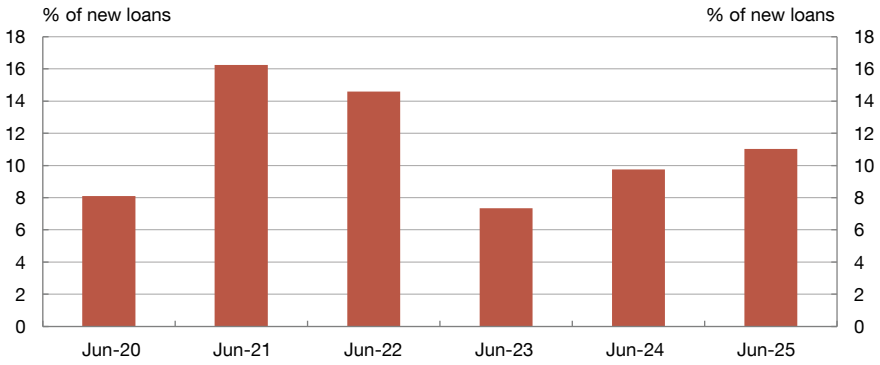


SOURCE: Banco de España. Latest observation: June 2025.

a The cumulative 12-month flow is calculated as the sum of the monthly flows from July to June as a percentage of the portfolio in June of the previous year.

Chart A2.3.1.4.5

New securitisations backed by loans originated in Spain as a percentage of new lending in Spain (a)



SOURCE: Banco de España. Latest observation: June 2025.

a The sample used to construct this chart includes those institutions which originated at least one securitisation transaction backed by loans arranged in Spain in the period July 2019-June 2025. The bar relating to June in year t is constructed by using information from the period between July of year t-1 and June of year t. The analysis is based on consolidated data at bank group level. The bars are calculated by dividing the amount of the new securitisations originated by the amount of new lending to households and firms.

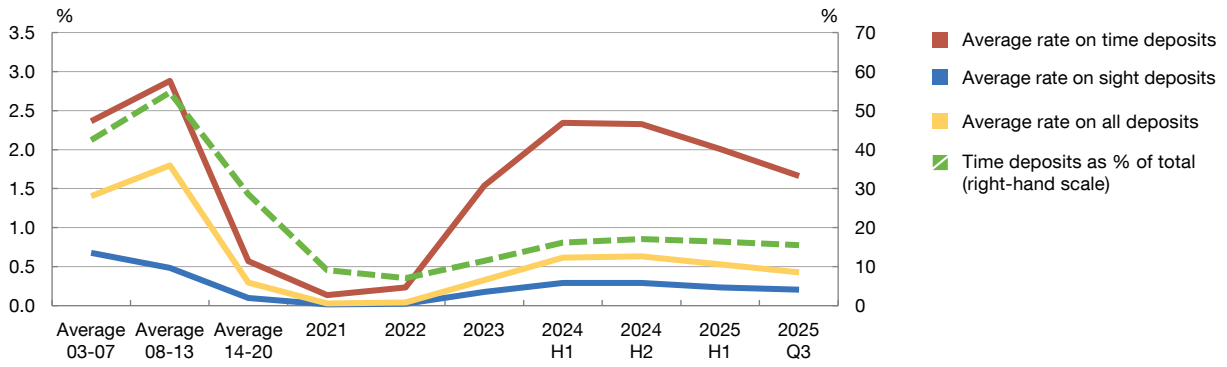
Note A2.3.1.4.6 (relates to Chart 3.9 in Section 3.1.4)

a The sample used to construct this chart comprises banks whose outstanding origination or investment amounts are positive in at least one month of the period June 2020-June 2025. The analysis is based on consolidated data at bank group level. The "Origination - Synthetic" ("Origination - Traditional") bar is calculated as the ratio of the aggregated outstanding amount of synthetic (traditional) securitisation originations to total consolidated assets. The "Investment" bar (depicted on a negative scale, as this decreases the net outsourcing of credit risk via securitisations) is constructed analogously, but using the aggregate outstanding amount of securitisation investments in the numerator.

A2.3.1.5 Financing conditions and liquidity

Chart A2.3.1.5.1

Average rates for household and NFC deposits. Business in Spain. Individual data (a) (b)

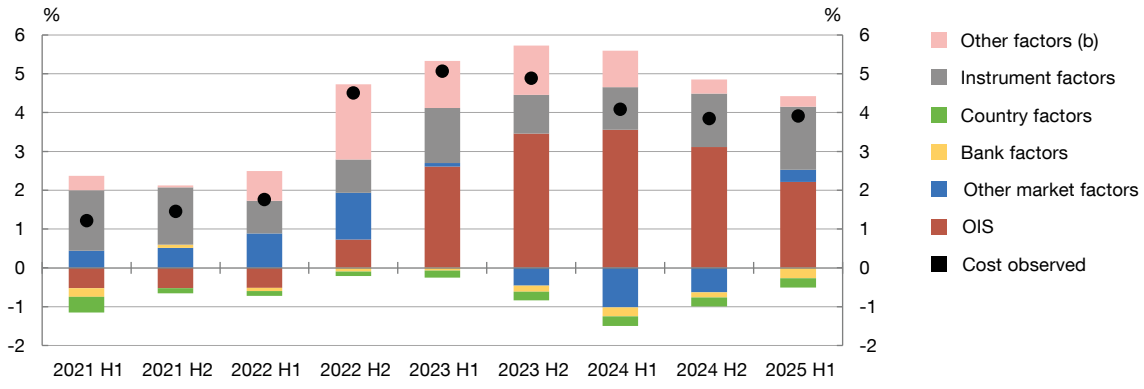


SOURCE: Banco de España. Latest observation: September 2025.

a Transactions carried out by deposit institutions' branches in Spain are considered.
b The interest rate in each period is the average monthly interest rate. Monthly interest rates, in turn, are calculated as the average of the sight and time deposit rates weighted by the respective deposit volumes.

Chart A2.3.1.5.2

Breakdown of the cost of debt issued by Spanish banks (a)

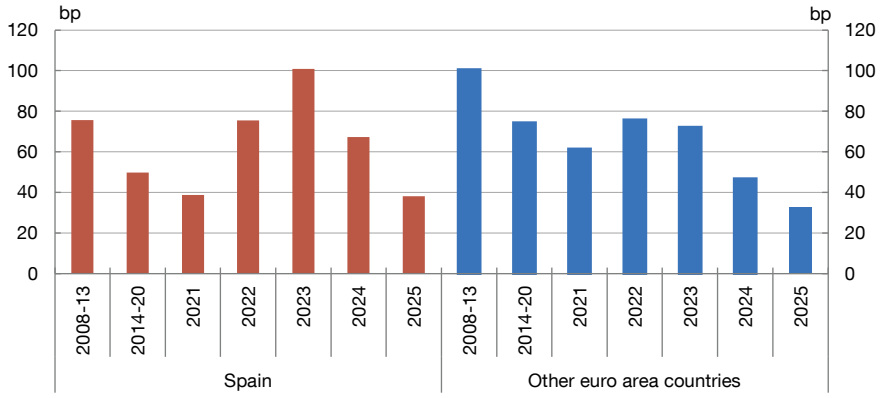


SOURCES: CSDB, Eikon Refinitiv and S&P Capital IQ. Latest observation: 30 June 2025.

a An econometric model is used which estimates the cost of the issuance of MREL-eligible instruments for a sample of European banks based on: (i) the bank's characteristics - size (G-SIB, O-SII, Pillar 1 or less than €100 bn), rating, CET1, ROA and efficiency ratio; (ii) country factors - GDP and financial market development level; (iii) instrument characteristics - level of subordination (AT1, Tier 2, SNP and senior) and bond maturity; iv) the risk-free interest rate using the three-month overnight index swap (OIS); and v) other market factors - sovereign spread (the country's ten-year sovereign yield spread less the ten-year OIS) and the slope of the curve (spread between seven-year and three-month OIS).
b This refers to statistical adjustments such as the constant of the model, the residual and selection adjustment. The selection bias adjustment varies for each bank and over time and is calculated as the inverse Mills ratio using the Heckman model (1979).

Chart A2.3.1.5.3

Comparison of the spread between sovereign bonds and senior unsecured debt instruments issued by major Spanish and other European banks (a)

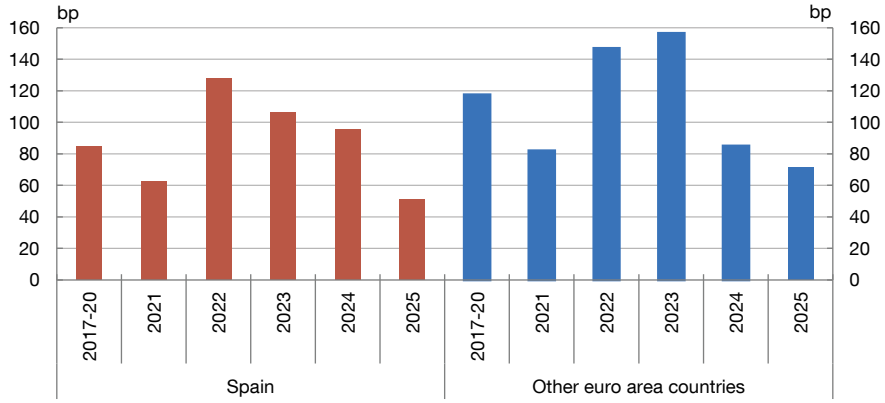


SOURCES: CSDB, Dealogic and Eikon Refinitiv. Latest observation: September 2025.

a The spread between the cost of euro-denominated fixed rate issues and the yield on sovereign bonds at the same term is shown, weighted by the volume of bonds issued by banks at different terms. Euro-denominated fixed rate issues by major credit institutions listed in Spain and Germany, France, Italy and the Netherlands (other euro area countries) are considered.

Chart A2.3.1.5.4

Comparison of the spread between sovereign bonds and senior non-preferred instruments issued by major Spanish and other European banks (a)



SOURCES: CSDB, Dealogic and Eikon Refinitiv. Latest observation: September 2025.

a The spread between the cost of euro-denominated fixed rate issues and the yield on sovereign bonds at the same term is shown, weighted by the volume of bonds issued by banks at different terms. Euro-denominated fixed rate issues by major credit institutions listed in Spain, Germany, France, Italy and the Netherlands ("Other euro area countries") are considered.

A2.3.2 Non-bank financial sector

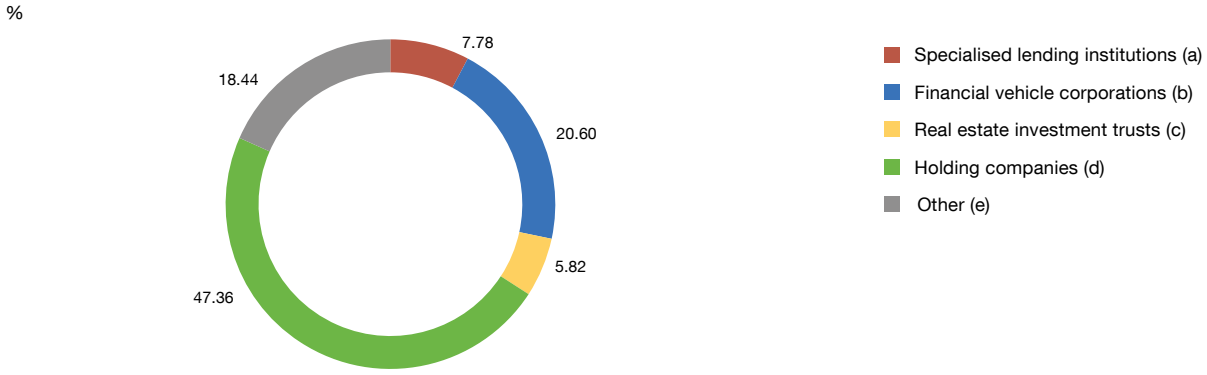
Note A2.3.2.1 (relates to Chart 3.13 in Section 3.2)

a In 2025 Q2 total non-consolidated assets of banks, investment funds, insurance companies, pension funds and other non-bank financial intermediaries in Spain amounted to €3,181 billion, €490 billion, €328 billion, €173 billion and €653 billion, respectively. The corresponding values for the euro area amounted to €39,376 billion, €20,929 billion, €8,843 billion, €3,354 billion and €25,227 billion, respectively.

b The NBFI sector includes money market funds, non-monetary investment funds, insurance companies, pension funds and other non-bank financial intermediaries. In turn, the latter subcategory includes specialised lending institutions, venture capital firms, securities dealers, financial vehicle corporations, central counterparty clearing houses, real estate investment trusts, securities agencies, collective investment institution management companies, mutual guarantee societies, financial group head offices, appraisal companies, payment institutions, holding companies, special-purpose entities that issue securities and other specialised financial institutions.

Chart A2.3.2.2

Weight of various types of entities included in "Other NBFIs". Non-consolidated asset data



SOURCE: Banco de España. Latest observation: December 2023.

a Specialised lending institutions are those that specialise in offering loans within specific areas, such as consumer lending, mortgages, credit cards, guarantees, etc.
b Financial vehicle corporations are firms whose main activities are: i) conducting securitisation operations with a structure designed to isolate the firm's payment obligations from those of the originator or the insurer or reinsurer, and ii) issuing debt securities, other debt instruments, shares or units in financial vehicle corporations and/or financial derivatives. These funds may also have, or potentially have, underlying assets that legally or economically back the issuance of financing instruments offered for public sale or sold on the basis of private investments.
c Real estate investment trusts are public limited companies that trade on regulated or alternative markets. Their main corporate purpose is the direct or indirect holding of real estate assets for rental purposes.
d Holding companies are financial firms whose main corporate purpose is the holding and management of controlling interests in other firms, whether subsidiaries or affiliates.
e "Other" includes venture capital firms, securities dealers, central counterparty clearing houses, securities agencies, collective investment institution management companies, mutual guarantee societies, financial group head offices, appraisal companies, payment institutions and special-purpose entities that issue securities.

Note A2.3.2.3 (relates to Chart 3.14 in Section 3.2)

a Leverage is calculated as the ratio of total assets to shares/units issued for each fund type and geographical area.
b "Other" is a residual category encompassing all funds not classified as equity, fixed-income, mixed or hedge funds. This category also includes real estate funds, since in Spain such funds' balance sheets have been reported under this category since 2025 Q1 to ensure statistical confidentiality.

Note A2.3.2.4 (relates to Chart 3.15 in Section 3.2)

a The liquidity ratio is calculated as cash to total assets for each fund type and geographical area.
b For Spain, CNMV data for the universe of funds domiciled in Spain are used. Lipper Refinitiv provides adequate coverage of liquidity information for funds domiciled in the euro area (77% of funds).

Note A2.3.2.5 (relates to Chart 3.16 in Section 3.2)

a The variable "Assets potentially affected by large-scale redemptions" is defined as the percentage of assets of funds affected by high investor redemptions. A fund is in this situation when the ratio of net capital flows to total assets is below the 10th percentile of the historical distribution (2013 Q4 - 2025 Q2) for the same fund type. Among these funds, the assets affected by high redemptions are those equivalent to the proportion of negative net flows exceeding the historical 10th percentile. For instance, if a fund has net flows equivalent to -10% of its total assets and the historical 10th percentile is -5%, then an estimated 5% of its assets are potentially affected by high redemptions.

b The percentages and the median have been calculated based on the historical series of the variable "Assets potentially affected by large-scale redemptions" for each fund type and geographical area.

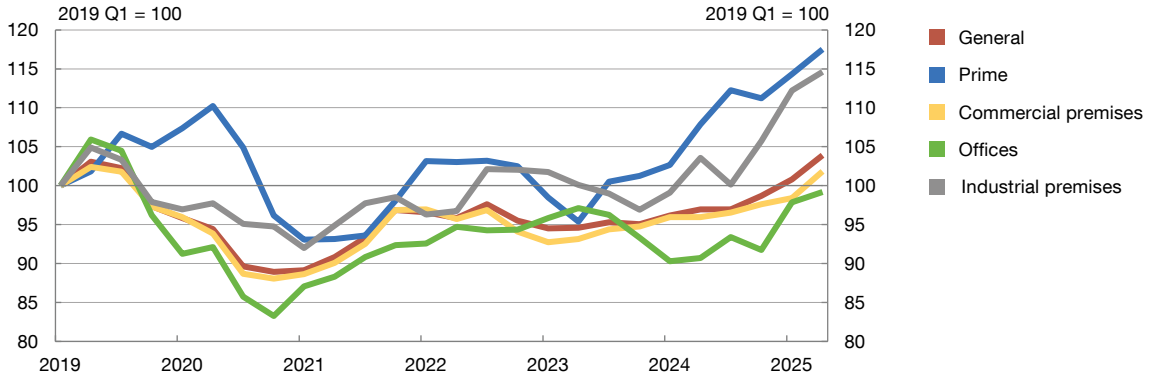
A2.3.3 Systemic interconnections

All relevant charts pertaining to this section are included in Section 3.3 of the FSR.

A2.4.1 The Spanish real estate market

Chart A2.4.1.1

Commercial real estate sector price indices (a)



SOURCES: Colegio de Registradores and Banco de España. Latest observation: June 2025.

a Based on estimates using a hedonic regression model for each stratum. The aggregate index is the average weighted by the relative share of transactions made in each segment (4% for offices, 78% for commercial premises and 18% for industrial premises). In 2025 properties in prime locations, i.e. those located in central areas of the main large cities (Barcelona, Bilbao, Madrid, Málaga, Palma and Valencia), represented 4% of transactions conducted in the commercial real estate segment as a whole in the first two quarters of 2025.

Note A2.4.1.2 (relates to Chart 4.4 in Section 4.1)

b Drawing on four indicators of house price imbalances: (i) the house price gap; (ii) the house price-to-household disposable income ratio gap; (iii) the ordinary least squares (OLS) model that estimates house prices based on long-term trends in household disposable income and mortgage rates; and (iv) the error correction model that estimates house prices based on household disposable income, mortgage rates and fiscal effects. All variables expressed in real terms relative to the GDP and consumption deflators. The long-term trends for indicators (i) to (iii) are calculated using a statistical one-sided Hodrick-Prescott filter with a smoothing parameter equal to 400,000. All four indicators have an equilibrium value of zero.

c The synthetic indicator for the real estate market is constructed drawing on 20 individual warning indicators classified into four categories: (1) households' financial position (debt, total financial burden, interest burden, gross saving rate, saving rate not earmarked for debt service); (2) credit conditions (loans for real estate activities relative to GDP, loans for construction relative to GDP, new housing loans relative to GDP, probability of default based on LTV ratio); (3) valuation (annual change in real house

prices, indicators of imbalances and affordability indicators (mortgage payments relative to gross disposable income and house price relative to gross disposable income)); and (4) real activity (housing approvals, house purchases and mortgages relative to number of households, construction workers registered with social security as a share of total registered, difference between housing starts and change in households). For more details, see Pana Alves, Carmen Broto, María Gil and Matías Lamas. (2023). "Risk and vulnerability indicators for the Spanish housing market", Documentos Ocasionales, 2314, Banco de España. The synthetic index ranges from 0 to 1. Higher (lower) values indicate the presence of higher (lower) imbalances.

Note A2.4.1.3 (relates to Chart 4.6 in Section 4.1)

a The LTI ratio is estimated for each mortgage as the ratio of the initial mortgage principal to the household's net annual income. The LSTI ratio for each mortgage is estimated as the ratio of the total annual cost of servicing the mortgage loan (including principal and interest payments), calculated according to the terms of the loan agreement (time remaining to maturity, outstanding principal, interest rate type and interest rate spread), to the household's net annual income.

b The average LTI and LSTI ratios are calculated as the averages of those ratios in each mortgage weighted by their relative share (in terms of the principal) in the total flow of new mortgage loans for which the information needed to calculate the ratio is available.

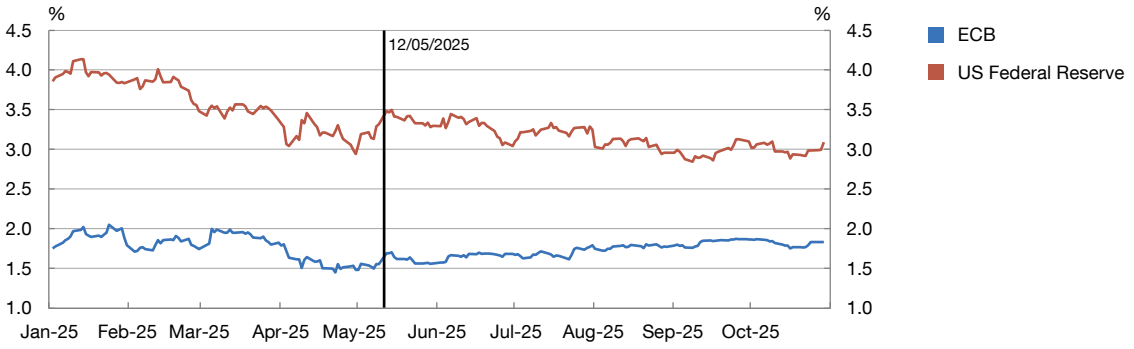
c Each series captures the values of each ratio based on the information available in the corresponding source: European Datawarehouse, Association of Registrars (Colegio de Registradores), Central Credit Register or Central Credit Register + postcode information from INE, in cases where it is necessary to impute income by postcode or extrapolate the value drawing on aggregate INE information.

d The LTV ratio is the amount of the mortgage principal relative to the appraisal value of the property at the time of purchase, while the LTP ratio considers the purchase price of the property, based on Association of Registrars information. The average values of both ratios are weighted by the principal of each mortgage.

A2.4.2 Financial markets

Chart A2.4.2.1

Policy rate expectations in the euro area and the United States: terminal rate (a)

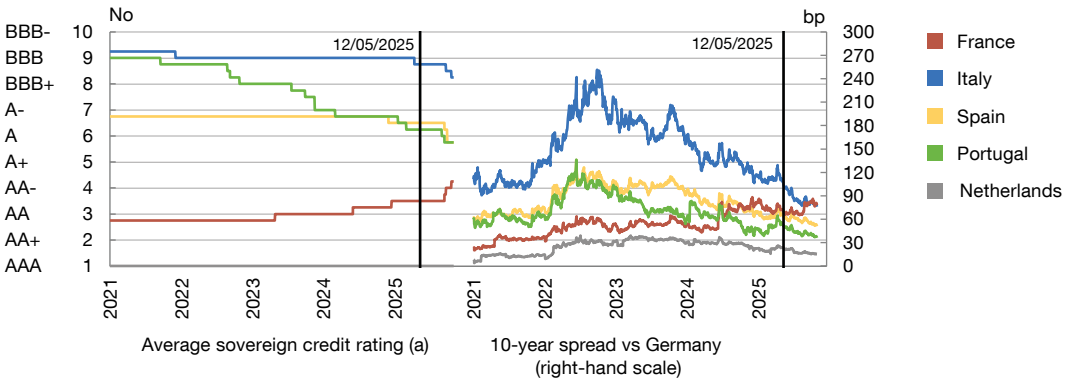


SOURCES: Banco de España and Bloomberg Data License. Latest observation: 29 October 2025. 12/5/2025 is the cut-off date for the latest FSR.

a The terminal rate is the policy rate level expected to be reached after a monetary policy easing or tightening cycle has been completed.

Chart A2.4.2.2

Sovereign debt: credit rating and spread vs German Bund



SOURCES: Banco de España and LSEG Datastream. Latest observation: 29/10/2025. 12/05/2025 is the cut-off date for the latest FSR.

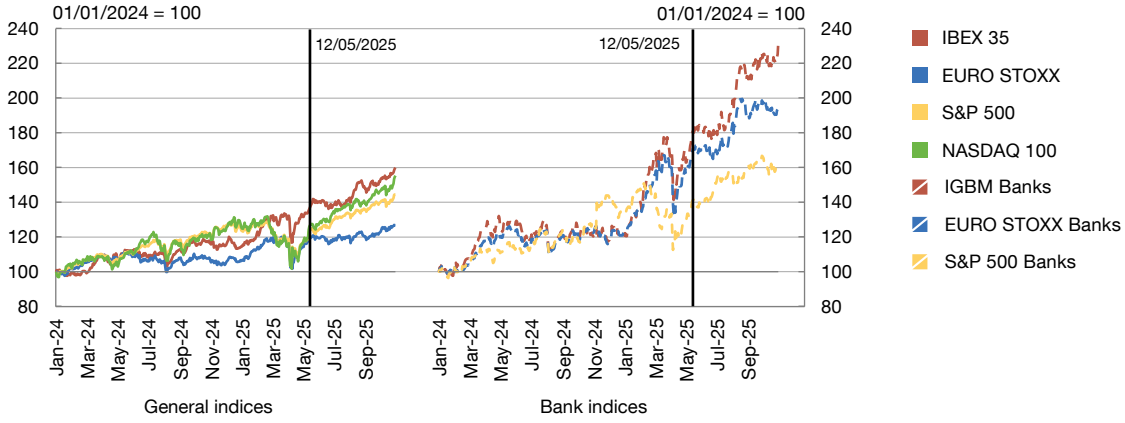
a Average S&P, Moody's, Fitch and DBRS credit ratings. The numerical scale has the following equivalencies: 1 corresponds to AAA/Aaa, 2-4 ranges from AA+/Aa1/AAH to AA-/Aa3/AA, 5-7 from A+/A1/AH to A-/A3/AL and 8-10 from BBB+/Baa1/BBBH to BBB-/Baa3/BBBL.

Note A2.4.2.3 (relates to Chart 4.9.b in Section 4.2)

e The equity risk premium is calculated drawing on a two-stage dividend discount model (Russell J. Fuller and Chi-Cheng Hsia. (1984). "A Simplified Common Stock Valuation Model". Financial Analysts Journal, 40(5), pp. 49-56).

Chart A2.4.2.4

Stock market indices: general and banks

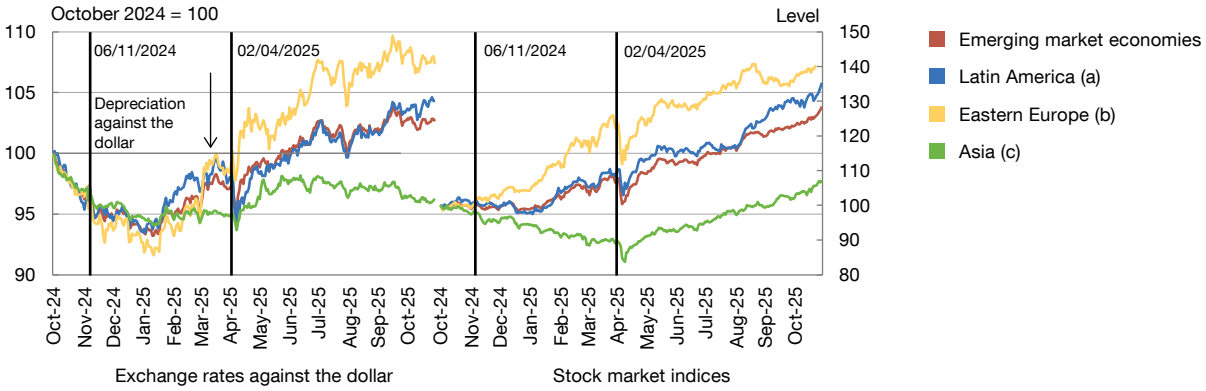


SOURCE: LSEG Datastream. Latest observation: 29/10/2025. 12/05/2025 is the cut-off date for the latest FSR.

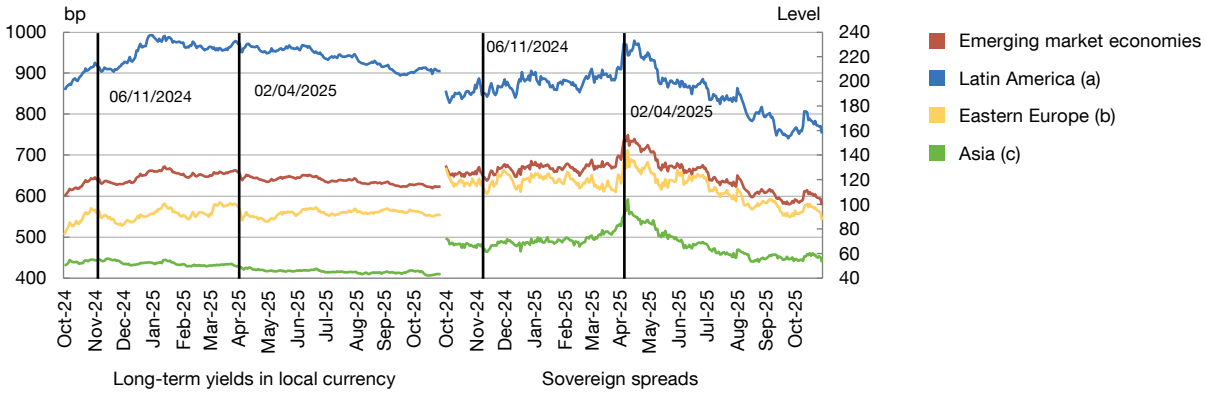
Chart A2.4.2.5

Exchange rates, stock market indices and cost of public debt in emerging market economies

A2.4.2.5.a Exchange rates and stock market indices



A2.4.2.5.b Cost of public debt



SOURCES: Banco de España and LSEG Datastream. The US presidential elections were held on 06/11/2024. The tariff war escalated on 02/04/2025. Latest observation: 29 October 2025.

a Average for Brazil, Chile, Colombia, Mexico and Peru.
b Average for Czech Republic, Poland and Hungary.
c Average for China, South Korea, the Philippines, India, Indonesia, Malaysia and Thailand.

A2.5 Risks

All relevant charts pertaining to this section are included in Section 5 of the FSR.

A2.6 Macroprudential policy

Note A2.6.1.1 (relates to Chart 6.1 in Section 6.1)

b The output gap represents the percentage difference between observed GDP and its quarterly potential level. Values calculated at constant 2010 prices. See Pilar Cuadrado and Enrique Moral-Benito. (2016). "Potential growth of the Spanish economy". Documentos Ocasionales, 1603, Banco de España. The credit-to-GDP gap is calculated as the difference, in percentage points, between the observed ratio and the long-term trend calculated using a statistical one-sided Hodrick-Prescott filter with a smoothing parameter equal to 25,000. This parameter is calibrated to the financial cycles historically observed in Spain.

See Jorge E. Galán. (2019). "Measuring credit-to-GDP gaps. The Hodrick-Prescott filter revisited". Documentos Ocasionales, 1906, Banco de España. The bank credit-to-GDP gap is calculated identically to the credit-to-GDP gap, but only taking into account bank lending. The grey vertical bands denote periods of economic crisis in Spain: the last systemic banking crisis and the economic crisis triggered by the COVID-19 health crisis.

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The cut-off date for this report: 29 October 2025.

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SYMBOLS AND ABBREVIATIONS

AT1	Additional Tier 1
ATAs	Average total assets
BBMs	Borrower-based measures
BCBS	Basel Committee on Banking Supervision
BCP	Basel Core Principales
BIS	Bank for International Settlements
BLS	Bank Lending Survey
bn	Billion
bp	Basis points
CBO	US Congressional Budget Office
CBQ	Banco de España Central Balance Sheet Data Office Quarterly Survey
CCR	Banco de España Central Credit Register
CCyB	Countercyclical capital buffer
CDS	Credit default swap
CET1	Common Equity Tier 1
CGP	Code of Good Practice
CMDI	Crisis Management and Deposit Insurance
CMU	Capital Markets Union
CNMV	National Securities Market Commission
COE	Cost of equity
COVID-19	Coronavirus disease 2019
CPI	Consumer Price Index
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
DeFi	Decentralised Finance
DFR	Deposit facility rate
DGS	Deposit Guarantee Scheme
DIs	Deposit institutions
DORA	Digital Operational Resilience Act
DSTI	Debt service-to-income ratio
DTI	Debt-to-income ratio
EBA	European Banking Authority
EBAE	Encuesta del Banco de España sobre la Actividad Empresarial (Banco de España Business Activity Survey)
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
ECB	European Central Bank
EEA	European Economic Area
EFF	Encuesta Financiera de las Familias (Spanish Survey of Household Finances)
EPC	Energy performance certificate
ESG	Environmental, social and governance
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
€STR	Euro short-term rate
EU	European Union
EURIBOR	Euro Interbank Offered Rate
FDIC	Federal Deposit Insurance Corporation
FLESB	Forward-looking exercise on Spanish banks
FOMC	Federal Open Market Committee
FSB	Financial Stability Board
FSR	Financial Stability Report
GAR	Green Asset Ratio
GDP	Gross domestic product
G-SIBs	Global systemically important banks
G-SIIs	Global systemically important institutions
GVA	Gross value added
H	Half-year
HICP	Harmonised Index of Consumer Prices
HQLAs	High Quality Liquid Assets
ICO	Instituto Oficial de Crédito (Official Credit Institute)
ID	Data obtained from individual financial statements
IGAE	Intervención General de la Administración del Estado
IIP	International investment position
IMF	International Monetary Fund
INE	Instituto Nacional de Estadística (National Statistics Institute)
IRB	Internal Ratings-Based
LCR	Liquidity Coverage Ratio
LGFV	Local government financing vehicle
IRS	Interest-rate swap
LSIs	Less significant institutions
LSTI	Loan service-to-income ratio
LTI	Loan-to-income ratio
LTP	Loan-to-price ratio
LTV	Loan-to-value ratio
m	Million
MiCA	Markets in Crypto-assets Regulation
MREL	Minimum Requirement for own funds and Eligible Liabilities
NBER	National Bureau of Economic Research
NBFI	Non-bank financial intermediation
NDERs	Narrowly defined effective rates
NFCs	Non-financial corporations
NGEU	NextGenerationEU
NPLs	Non-performing loans
NSFR	Net Stable Funding Ratio
OCC	Office of the Comptroller of the Currency
OECD	Organisation for Economic Co-operation and Development
OIS	Overnight Interest Swap
OPEC	Organization of the Petroleum Exporting Countries
OPEC+	Expanded Organization of the Petroleum Exporting Countries
O-SIIs	Other systemically important institutions
OTC	Over-the-counter
PD	Probability of default
P/E	Price-to-earnings ratio
PMI	Purchasing Managers' Index
pp	Percentage points
PRA	Prudential Regulation Authority
Q	Quarter
q-o-q	Quarter-on-quarter
Repo	Repurchase agreement
ROA	Return on assets
ROE	Return on equity
RWAs	Risk-weighted assets
SAFE	Survey on the access to finance of enterprises
SCR	Solvency Capital Requirement
SHSG	Securities Holdings Statistics Group
SIs	Significant institutions
SLIs	Specialised lending institutions
SMEs	Small and medium-sized enterprises
SNP	Senior non-preferred
SRI	Systemic risk indicator
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
sSyRB	Sectoral systemic risk buffer
SyRB	Systemic risk buffer
tn	Trillion
VAR	Vector autoregression
WEO	World Economic Outlook
y-o-y	Year-on-year

ISO COUNTRY CODES

AT	Austria
AU	Australia
BE	Belgium
BG	Bulgaria
BR	Brazil
CA	Canada
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
KR	South Korea
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	Türkiye
US	United States